Changes for the Better

MITSUBISHI ELECTRIC

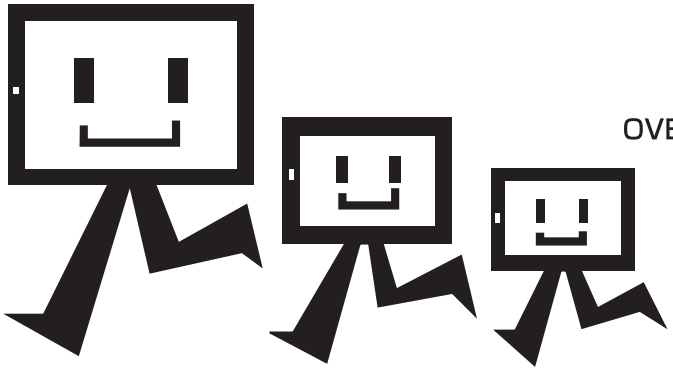
Mitsubishi Graphic Operation Terminal

Simply the best est!

GRAPHIC OPERATION TERMINAL

GOT1000

GOT1000 Series Handbook Ver. C



CC-Link IE

MELFANS web

MITSUBISHI ELECTRIC FA NETWORK SERVICE ON WORLD WIDE

http://MitsubishiElectric.co.jp/melfansweb/english/

MELSOFT

iQ Platform

INTRODUCTION

GOT1000 Series Handbook describes the basic information about GOT1000 series of MITSUBISHI Graphic Operation Terminal (hereinafter abbreviated as GOT), the information required for the GOT installation, and others.
For more details, refer to the manuals shown in this handbook.

HOW TO USE THIS HANDBOOK

Be sure to use this handbook together with the following catalogs and manuals.

Catalog

The following catalog describes the information about new functions, the product lineup, the cost, and others.

A version of the catalog corresponds to this handbook
L(NA)08054-E 0812(MDOC)

Manuals related to GOT1000 series

The manuals describe the detailed information for the GOT.
For details of the information shown in this handbook, refer to the related manuals of GOT1000 series.
The manuals related to GOT1000 series can be downloaded from the MITSUBISHI ELECTRIC FA NETWORK SERVICE website (http://wwwf2.mitsubishielectric.co.jp/english/index.html).

MANUALS

For details of the connection configuration and software operation/installation, refer to the following manuals.

For details about GOT hardware

- GT16 User's Manual SH-080778ENG (1D7M88)
- GT15 User's Manual SH-080528ENG (1D7M23)
- GT11 User's Manual JY997D17501 (09R815)
- GT10 User's Manual JY997D24701 (09R819)
- Handy GOT User's Manual JY997D20101 (09R817)

For details about screen configurations, functions, and usage of GT SoftGOT1000

- GT SoftGOT1000 Version2 Operating Manual
  SH-080602ENG (1D7M48)

For details about installation operation, basic operation of screen design, and data transfer operation of GT Designer2

- GT Designer2 Version2 Basic Operation/Data Transfer Manual (For GOT1000 Series)
  SH-080529ENG (1D7M24)

For details about screen configurations, functions, and usage of GT Simulator2

- GT Simulator2 Version2 Operating Manual
  SH-080546ENG (1D7M34)

For details about specifications and setting methods of object functions

- GT Designer2 Version2 Screen Design Manual (For GOT1000 Series)
  SH-080530ENG (1D7M25)

For details about connection configurations and how to make cable

- GOT1000 Series Connection Manual
  SH-080532ENG (1D7M26)

For details about extended functions and option functions

- GOT1000 Series Extended/Option Functions Manual
  SH-080544ENG (1D7M32)

For details about specifications, system configurations, and setting methods of gateway function

- GOT1000 Series Gateway Functions Manual
  SH-080545ENG (1D7M33)

For details about specifications, system configurations, and setting methods of MES interface function

- GOT1000 Series MES Interface Function Manual
  SH-080654ENG (1D7M63)

NEWLY ADDED FUNCTIONS

The following shows newly added functions.

As of August 2008

Added new model

- GT16 models (GT1695M-XTBA, GT1695M-XTBD, GT1685M-STBA and GT1685M-STBD) are added.

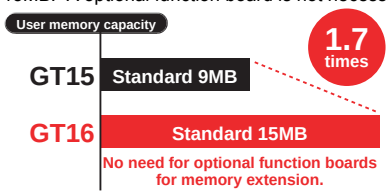
  ☞ GT16 User's Manual

- Two models of 5.7 type (GT1055-QSBD and GT1050-QBBD) are added to GT10.

  ☞ GT10 User's Manual

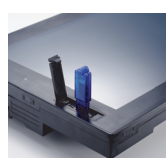
Feature of GT16

- Greatly increased memory capacity! Requiring no optional function boards
  - Enables use of real parts without having to worry about the memory capacity
    The user memory (Built-in flash memory: ROM) is increased from the standard 9MB to 15MB. A optional function board is not necessary for memory extension.



  - Useful functions are available while requiring no optional function boards
    The memory for operation (RAM) is increased to the standard 57MB.
    The memory up to 57MB can be used without an optional function board, so no optional function boards that were necessary when using a multi-channel function, a document display and a Q/QnA ladder monitor function are required.

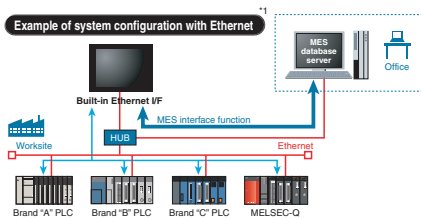
- Equipped with USB host and USB devices
  - USB host (Type A)
    Hooking up a USB memory drive here enables storage of resource data such as operating systems, project data and alarm logs, as well as backup/restored data such as sequence programs. The data communication is simple and easy between the GOT main unit and a CF card.



  - USB device (Mini-B)
    Connecting the USB device (Mini-B) to a personal computer enables the transfer of operating systems and project data without opening the panel. The FA transparent function enables modification of sequence programs.

● Various interfaces are available as standard features, including Ethernet, RS-422/485, and RS-232

- A variety of built-in interfaces
  The built-in interfaces (Ethernet, RS-422/485 and RS-232) enable connection to up to four kinds of FA equipment simultaneously without installing an additional optional communication unit.
- Ethernet helps extend systems
  The built-in Ethernet interface connects to a PLC CPU with a built-in Ethernet and a host system easily while requiring no optional communication unit.
- Ethernet enables simultaneous monitoring of PLCs of different manufacturers
  The built-in Ethernet interface enables connection to up to four kinds of PLCs of different manufacturers.



*1: When connecting GT16 to an equipment that meets the 10BASE (-T/2/5) standard, use the switching hub and operate in an environment where 10Mbps and 100Mbps can be mixed.

● All the models are compatible with multimedia and video/RGB units

- Compatible with recording and playing back high resolution motion images
  The Multimedia functions capable of recording and playing back smooth flow of motion images can visually check and monitor site conditions in an emergency and give instructions in the form of motion image manuals.
- The 15" type is also compatible with video/RGB
  Even when displaying motion images from four video cameras in four respective windows simultaneously on the screen, the GT16 displays natural, smooth, and large motion images without skipping image cells.

● Featuring an analog touch panel

- Layout flexibility allows to create desired pictures
  Free to lay out objects such as touch switches, enabling creation of desired screens. The clear display without grids makes it easy to recognize pictures and characters.

● Overlap window extension
- Displaying up to 5 overlapped windows on the screen at one time. (Up to 2 for models other than the GT16)
- More information appears simultaneously on the screen, improving flexibility in screen design.

● Batch self check function
- Enables to easily check the GOT operation history on a utility screen, helping you to locate the cause of the problem.
- Even if not set up in advance by the GT Designer2, the utility screen shows the data for the user to check. It is useful in an emergency.

■ GOT enhanced by new functions

● TrueType font is added (7 segments numerical display)(GT16, GT15, GT11)
- The TrueType number fonts enable seven-segment display.

● Operability of GT Designer2 is improved (GT16, GT15, GT11)

Duplication of object
- When "Duplicate" is selected from the context menu that is prompted by right click on the editor screen, copy and paste are done at one time, enabling to quickly create graphics and objects of the same configuration.

Guideline
- Simply lay out the graphics and objects along the guidelines, and you can align and position them easily and neatly.

Device list/batch device conversion
- Listing devices used in a script and batch conversion of device numbers are available, increasing editing efficiency.
- Reading out other project data the corresponds to the script, improving data sharing.

Define the width/height of objects and figures numerically
- Use the toolbars and property sheets to define the X and Y coordinates, width and height of objects and figures.
- You can easily fine-tune the sizes dot by dot, which is otherwise difficult with a mouse.

■ Expanded manufactures and models of controllers

● GT16/GT15/GT11/GT10

Programmable controller (FX_{3G}) is added.

☞ MITSUBISHI Programmable Controller in section 4.1

Third party programmable controller

LS INDUSTRIAL SYSTEMS programmable controllers (K300S, K200S, K120S and K80S) are added.*1

☞ LS INDUSTRIAL SYSTEMS programmable controller in section 4.3.18

*1: GT16 will soon be supported.

● GT10

Third party programmable controller

SIEMENS programmable controllers (S7-300/400 series) are added.

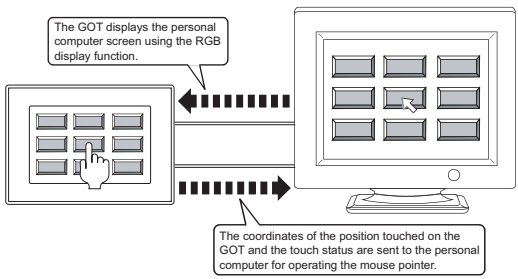
☞ SIEMENS programmable controller in section 4.3.17

As of April 2008

■ GOT enhanced by new functions

● Remote personal computer operation function

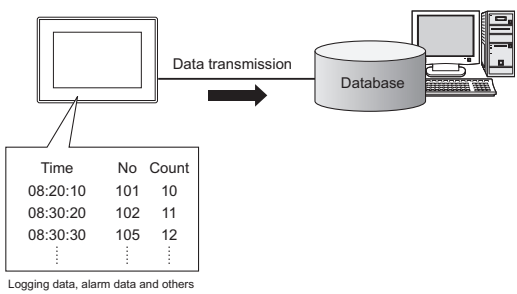
The function enables to operate the mouse pointer on a personal computer by touching the personal computer screen displayed on the GOT using the RGB display function.



● Resource data send function (Supported by the MES interface function.)

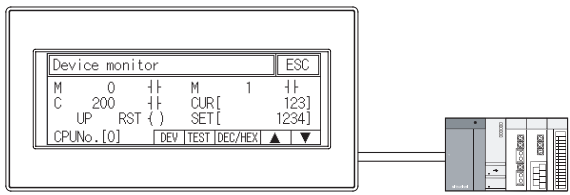
The resource data send function allows the GOT to send resource data collected in a GOT buffering area and a CF card to a database.

Device values for controllers, alarm data for the GOT, and others can be stored to the database without any communication programs.



● Device monitor function (Supported by GT10.)

For a controller connected to the GOT, forcibly turning on or off devices of the controller and changing the set value or present value are available.



■ **Computer link connection supports the connection to A series**

Computer link connection supports the connection to A series for GT10.

■ **Supporting the connection to CC-Link IE controller network**

CC-Link IE controller network, which allows sending/receiving large size data at high speed connection, is now available.

■ **Expanded manufactures and models of controllers**

● GT15/GT11/GT10

Programmable controllers (Q02PHCPU*1, Q06PHCPU*1, Q03UDECPU, Q04UDEHCPU, Q06UDEHCPU, Q13UDEHCPU and Q26UDEHCPU) are added.

*1: Not supported by GT10.

☞ MITSUBISHI Programmable Controller in section 4.1

Third party programmable controller

OMRON programmable controller (CP1L) is added.

☞ OMRON programmable controller in section 4.3.2

● GT15/GT11

Third party programmable controller

KOYO EI programmable controllers (SU-5E, SU-6B, SU-5M, SU-6M, DL06, D2-250-1, D2-260 and PZ3) are added.

☞ KOYO EI programmable controller in section 4.3.4

GE FANUC programmable controllers (Series 90-70, Series 90-30 and VersaMax Micro) are added.

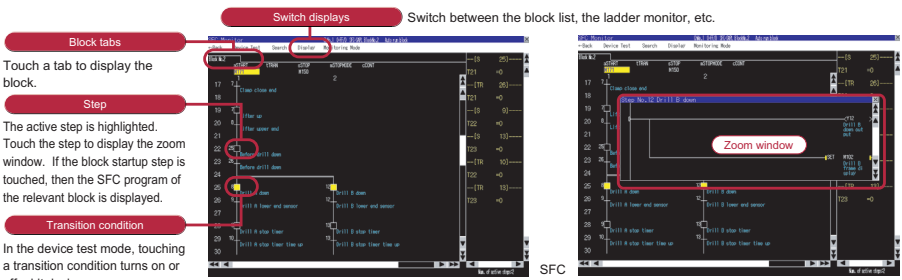
☞ GE FANUC programmable controller in section 4.3.16

As of February 2008

■ GOT enhanced by new functions

● SFC monitor function

The GOT can monitor a SFC program of a Q series programmable controller CPU with a SFC diagram, and users can save troubleshooting steps.



■ Supporting the device data transfer function

GT SoftGOT1000 supports the device data transfer function.

■ Expanded manufactures and models of controllers

● GT15/GT11/GT10

Programmable controllers (Q13UDHCPU and Q26UDHCPU) are added.

☞ MITSUBISHI Programmable Controller in section 4.1

Third party programmable controller

KEYENCE programmable controllers (KV-3000 and KV-5000) are added.

☞ KEYENCE programmable controller in section 4.3.3

TOSHIBA MACHINE programmable controllers (TC3-01, TC3-02, TC6-00 and TC8-00) are added.

☞ TOSHIBA MACHINE programmable controller in section 4.3.7

YASKAWA programmable controller (CP-312) is added.

☞ YASKAWA programmable controller in section 4.3.13

● GT15/GT11

Third party programmable controller

TOSHIBA programmable controller (model 2000 (S2T)) is added.

☞ TOSHIBA programmable controller in section 4.3.6

● GT10

Programmable controllers (Q02UCPU, Q03UDCPU, Q04UDHCPU and Q06UDHCPU) are added.

☞ MITSUBISHI Programmable Controller in section 4.1

■ Expanded option devices

The memory loader for GT10, which allows writing and reading of various data, is added to option devices.

As of October 2007

■ Added new model

● The serial connection dedicated model (GT1155-QTBD) is added to GT11.

☞ GT11 User's Manual

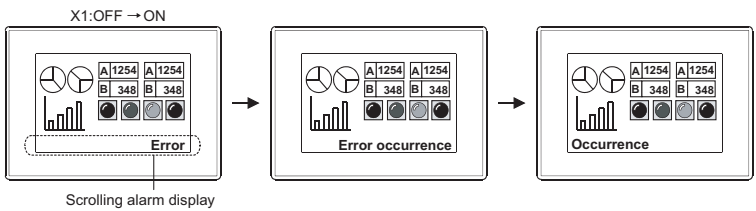
■ Supporting Windows Vista®

GT Designer2, GT Simulator2, and GT SoftGOT1000 are now compatible with Windows Vista®.

■ GOT enhanced by new functions

● Scrolling alarm display function (GT11 and GT10)

The function enables user-created comments to scroll across the screen from right to left when an alarm occurs.



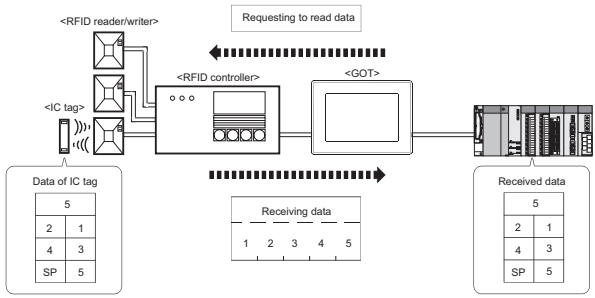
● Starting up with CF card

Installing the extended function OS and option OS to the A drive (CF card) is now available.

Booting the GOT OS from the CF card (A drive) installed in the GOT is now available.

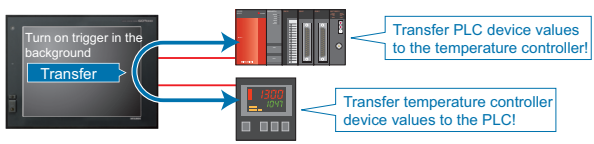
● RFID connection

The function enables the GOT to write data received by a RFID reader/writer of a RFID controller connected to the GOT into devices.



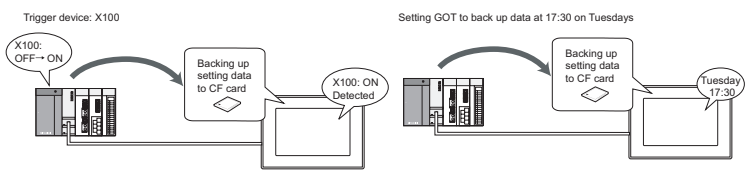
● Device data transfer function

The function enables the GOT to read values of specified devices and write the values into the other devices at any timing or by trigger intervals.



● Utilization of backup/restore function

The trigger backup enables the GOT to back up setting data for controllers automatically by setting the trigger device or the days and time.



Connection to MITSUBISHI industrial robots

The GOT now can be connected to CRnQ-700 and CRnD-700 robot controllers.

MODBUS®/TCP connection

MODBUS®/TCP connection is now available for connecting the GOT to Modicon Premium series and Modicon Quantum series of the SCHNEIDER programmable controller and STARDOM of the YOKOGAWA programmable controller.

Expanded manufactures and models of controllers

- GT15/GT11/GT10

  The AJ65BT-R2N is added to a peripheral connection module for CC-Link connection (via G4).

  ☞ CC-Link connection (via G4) in section 4.1.9

- GT10

  Inverter

  Supporting the connection to FREQROL-500 series and FREQROL-700 series inverters

  ☞ Inverter connection in section 4.2.1

  Supporting the connection to KEYENCE programmable controller

  ☞ KEYENCE programmable controller in section 4.3.3

  Supporting the connection to MATSUSHITA programmable controller

  ☞ MATSUSHITA programmable controller in section 4.3.10

  Supporting the connection to YASKAWA programmable controller

  ☞ YASKAWA programmable controller in section 4.3.11

ABBREVIATIONS AND GENERIC TERMS

The following shows the abbreviations and generic terms used in this handbook.

■GOT

Abbreviations and generic terms			Description
GOT1000 Series	GT SoftGOT1000		Abbreviation for GT SoftGOT1000
	GT1695	GT1695M-X	Abbreviation of GT1695M-XTBA, GT1695M-XTBD
	GT1685	GT1685M-S	Abbreviation of GT1685M-STBA, GT1685M-STBD
	GT16□□, GT16		Abbreviation of GT1695, GT1685
	GT1595	GT1595-X	Abbreviation for GT1595-XTBA and GT1595-XTBD
	GT1585	GT1585V-S	Abbreviation for GT1585V-STBA and GT1585V-STBD
		GT1585-S	Abbreviation for GT1585-STBA and GT1585-STBD
	GT157□	GT1575V-S	Abbreviation for GT1575V-STBA and GT1575V-STBD
		GT1575-S	Abbreviation for GT1575-STBA and GT1575-STBD
		GT1575-V	Abbreviation for GT1575-VTBA and GT1575-VTBD
		GT1575-VN	Abbreviation for GT1575-VNBA and GT1575-VNBD
		GT1572-VN	Abbreviation for GT1572-VNBA and GT1572-VNBD
	GT156□	GT1565-V	Abbreviation for GT1565-VTBA and GT1565-VTBD
		GT1562-VN	Abbreviation for GT1562-VNBA and GT1562-VNBDn
	GT155□	GT1555-V	Abbreviation for GT1555-VTBD
		GT1555-Q	Abbreviation for GT1555-QTBD and GT1555-QSBD
		GT1550-Q	Abbreviation for GT1550-QLBD
	GT15□□, GT15		Abbreviation for GT1595, GT1585, GT157□, GT156□, and GT155□
	GT115□	GT1155-Q	Abbreviation for GT1155-QTBDQ, GT1155-QSBDQ, GT1155-QTBDA, GT1155-QSBDA, GT1155-QTBD, and GT1155-QSBD
		GT1150-Q	Abbreviation for GT1150-QLBDQ, GT1150-QLBDA, and GT1150-QLBD
	Handy GOT	GT1155HS-Q	Abbreviation for GT1155HS-QSBD
		GT1150HS-Q	Abbreviation for GT1150HS-QLBD
	GT11□□, GT11		Abbreviation for GT115□ and Handy GOT
	GT105□	GT1055-Q	Abbreviation of GT1055-QSBD
		GT1050-Q	Abbreviation of GT1050-QBBD
	GT1030		Abbreviation for GT1030-LBD, GT1030-LBD2, GT1030-LBDW, GT1030-LBDW2, GT1030-LWD, GT1030-LWD2, GT1030-LWDW, and GT1030-LWDW2
	GT1020		Abbreviation for GT1020-LBD, GT1020-LBD2, GT1020-LBL, GT1020-LBDW, GT1020-LBDW2, GT1020-LBLW, GT1020-LWD, GT1020-LWD2, GT1020-LWL, GT1020-LWDW, GT1020-LWDW2, and GT1020-LWLW
	GT10□□, GT10		Abbreviation of GT105□ , GT1030, GT1020
GOT900 Series			Abbreviation for GOT-A900 series and GOT-F900 series
GOT800 Series			Abbreviation for GOT-800 series

Others

Abbreviations and generic terms	Description
ALLEN-BRADLEY	Generic term for Allen-Bradley that is a brand name of products manufactured by Rockwell Automation, Inc.
CHINO	Abbreviation for CHINO CORPORATION
FUJI FA	Abbreviation for Fuji Electric FA Components & Systems Co., Ltd.
FUJI SYS	Abbreviation for Fuji Electric Systems Co., Ltd.
GE FANUC	Abbreviation for GE Fanuc Automation Corporation
HITACHI	Abbreviation for Hitachi, Ltd.
HITACHI IES	Abbreviation for Hitachi Industrial Equipment Systems Co., Ltd.
JTEKT	Abbreviation for JTEKT Corporation
KEYENCE	Abbreviation for KEYENCE CORPORATION
KOYO EI	Abbreviation for KOYO ELECTRONICS INDUSTRIES CO., LTD.
LS IS	Abbreviation for LS Industrial Systems Co., Ltd.
MATSUSHITA	Abbreviation for Matsushita Electric Works, Ltd.
OMRON	Abbreviation for OMRON Corporation
RKC	Abbreviation for RKC INSTRUMENT INC.
SCHNEIDER	Abbreviation for Schneider Electric SA
SHARP	Abbreviation for Sharp Corporation
SHINKO	Abbreviation for SHINKO TECHNOS CO., LTD.
SIEMENS	Abbreviation for Siemens AG
TOSHIBA	Abbreviation for TOSHIBA CORPORATION
TOSHIBA MACHINE	Abbreviation for TOSHIBA MACHINE CO., LTD.
YAMATAKE	Abbreviation for Yamatake Corporation
YASKAWA	Abbreviation for YASKAWA ELECTRIC CORPORATION
YOKOGAWA	Abbreviation for Yokogawa Electric Corporation
MELSECNET/H	Abbreviation for MELSECNET/H network system
MELSECNET/H module	Abbreviation for MELSECNET/H network module
MELSECNET/10	Abbreviation for MELSECNET/10 network system
MELSECNET/10 module	Abbreviation for MELSECNET/10 network module
PC CPU module	Abbreviation for PC CPU Unit manufactured by CONTEC CO., LTD.
GOT (Server)	Abbreviation for GOTs that use the server function
GOT (Client)	Abbreviation for GOTs that use the client function
Windows® font	Abbreviation for TrueType font and OpenType font available for Windows® (Differs from the True Type fonts settable with GT Designer2)
Intelligent function module	Generic term for the modules other than the programmable controller CPU, power supply module, and I/O module that are mounted on a base unit
MODBUS® /TCP	Generic term for the protocol designed to use MODBUS® protocol messages on a TCP/IP network

CONTENTS

MEMO

1. GOT

This chapter describes the GOT overview.

1. GOT

1.1 Product Lineup

●GT16

With a variety of integrated functions, such as Ethernet and multimedia

NEW

15 type TFT (High-brightness, wide viewing angle)

GT1695M-XTBA AC type

GT1695M-XTBD DC type

Resolution: XGA 1024 × 768
Display color: 65536 colors

Multimedia, video/RGB model

NEW

12.1 type TFT (High-brightness, wide viewing angle)

GT1685M-STBA AC type

GT1685M-STBD DC type

Resolution: SVGA 800 × 600
Display color: 65536 colors

Multimedia, video/RGB model

●GT15

Wide range of use from network to stand alone

15 type TFT (High intensity and wide angle view)
GT1595-XTBA AC type
GT1595-XTBD DC type

Resolution: XGA 1024 × 768
Display color: 65536 colors

12.1 type TFT (High intensity and wide angle view)
GT1585V-STBA AC type
GT1585V-STBD DC type

Resolution: SVGA 800×600
Display color: 65536 colors
Video/RGB compatible

12.1 type TFT (High intensity and wide angle view)
GT1585-STBA AC type
GT1585-STBD DC type

Resolution: SVGA 800×600
Display color: 65536 colors

10.4 type TFT (High intensity and wide angle view)
GT1575V-STBA AC type
GT1575V-STBD DC type

Resolution: SVGA 800×600
Display color: 65536 colors
Video/RGB compatible

10.4 type TFT (High intensity and wide angle view)
GT1575-STBA AC type
GT1575-STBD DC type

Resolution: SVGA 800×600
Display color: 65536 colors

10.4 type TFT (High intensity and wide angle view)
GT1575-VTBA AC type
GT1575-VTBD DC type

Resolution: VGA 640×480
Display color: 65536 colors

10.4 type TFT
GT1575-VNBA AC type
GT1575-VNBD DC type

Resolution: VGA 640×480
Display color: 256 colors

10.4 type TFT
GT1572-VNBA AC type
GT1572-VNBD DC type

Resolution: VGA 640×480
Display color: 16 colors

8.4 type

TFT (High intensity and wide angle view)

GT1565-VTBA AC type

GT1565-VTBD DC type

Resolution: VGA 640 × 480
Display color: 65536 colors

8.4 type

TFT

GT1562-VNBA AC type

GT1562-VNBD DC type

Resolution: VGA 640 × 480
Display color: 16 colors

5.7 type

TFT (High intensity and wide angle view)

GT1555-VTBD DC type

Resolution: VGA 640×480
Display color: 65536 colors

5.7 type

TFT (High intensity and wide angle view)

GT1555-QTBD DC type

Resolution: QVGA 320×240
Display color: 65536 colors

5.7 type

STN

GT1555-QSBD DC type

Resolution: QVGA 320×240
Display color: 4096 colors

5.7 type

STN

GT1550-QLBD DC type

Resolution: QVGA 320×240
Display color: Monochrome in 16-level

●GT11

Enhanced with basic functions for stand alone application

5.7 type TFT
GT1155-QTBD DC type
GT1155-QTBDQ DC type Q bus connection*1
GT1155-QTBDA DC type A bus connection*2

Resolution: QVGA 320×240
Display color: 256 colors

5.7 type STN
GT1155-QSBD DC type
GT1155-QSBDQ DC type Q bus connection*1
GT1155-QSBDA DC type A bus connection*2

Resolution: QVGA 320×240
Display color: 256 colors

5.7 type STN
GT1150-QLBD DC type
GT1150-QLBDQ DC type Q bus connection*1
GT1150-QLBDA DC type A bus connection*2

Resolution: QVGA 320×240
Display color: Monocrome in 16-level

5.7 type Handy GOT/STN
GT1155HS-QSBD DC type

Resolution: QVGA 320×240
Display color: 256 colors

5.7 type Handy GOT/STN
GT1150HS-QLBD DC type

Resolution: QVGA 320×240
Display color: Monocrome in 16-level

*1: For QCPU (Q mode)/Motion controller CPU (Q series) connection
*2: For QnA/ACPU/Motion controller CPU (A series) connection

●GT10

Including all the basic functions required for a HMI display

NEW

5.7 type

STN

GT1055-QSBD 24VDC type

Resolution: QVGA 320×240
Display color: 256 colors

NEW

5.7 type

STN

GT1050-QBBD 24VDC type

Resolution: QVGA 320×240
Display color: Monochrome (white/blue) in 16-level

4.5 type

STN

GT1030-LBD	Black	24VDC type	RS-422 connection
GT1030-LBD2	Black	24VDC type	RS-232 connection
GT1030-LWD	White	24VDC type	RS-422 connection
GT1030-LWD2	White	24VDC type	RS-232 connection

Resolution: 288×96
Display color: Monochrome (white/black)
Backlight: 3-color LED (green/orange/red)

4.5 type

STN

GT1030-LBDW	Black	24VDC type	RS-422 connection
GT1030-LBDW2	Black	24VDC type	RS-232 connection
GT1030-LWDW	White	24VDC type	RS-422 connection
GT1030-LWDW2	White	24VDC type	RS-232 connection

Resolution: 288×96
Display color: Monochrome (white/black)
Backlight: 3-color LED (white/pink/red)

3.7 type

STN

GT1020-LBD	Black	24VDC type	RS-422 connection
GT1020-LBD2	Black	24VDC type	RS-232 connection
GT1020-LBL	Black	5VDC type	RS-422 connection
GT1020-LWD	White	24VDC type	RS-422 connection
GT1020-LWD2	White	24VDC type	RS-232 connection
GT1020-LWL	White	5VDC type	RS-422 connection

Resolution: 160×64
Display color: Monochrome (white/black)
Backlight: 3-color LED (green/orange/red)

3.7 type

STN

GT1020-LBDW	Black	24VDC type	RS-422 connection
GT1020-LBDW2	Black	24VDC type	RS-232 connection
GT1020-LBLW	Black	5VDC type	RS-422 connection
GT1020-LWDW	White	24VDC type	RS-422 connection
GT1020-LWDW2	White	24VDC type	RS-232 connection
GT1020-LWLW	White	5VDC type	RS-422 connection

Resolution: 160×64
Display color: Monochrome (white/black)
Backlight: 3-color LED (white/pink/red)

Use your personal computer as a GOT

GT SoftGOT1000 Version2

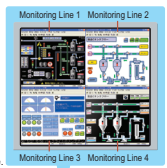
For GOT1000

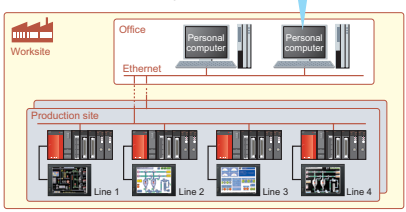
Screen data created by GT Designer2 Version2 can be used without conversion.
GT SoftGOT1000 is an HMI software which offers the GOT1000 functions on personal computers and panel computers.

Remote monitoring over the factory LAN

- Conditions at the production sites can be monitored from a remote location.
  - Multiple instances of GT SoftGOT1000 can run on a single personal computer.
  - Reduce cost by minimizing the system recovery time.

Upon occurrence of problems, the status of on-site equipment can be quickly monitored from your office. This reduces the time for an initial diagnosis.





Better linkage with other applications and more flexibility when creating screens

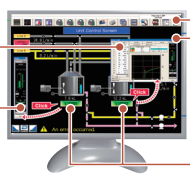
- Create a screen at a desired resolution depending on the applicable space on the screen. This function is useful when simultaneously displaying the GT SoftGOT1000 screen with another application software program on a personal computer display. (Screen size can be specified in the range of VGA to UXGA)
- Full-screen display: The whole monitoring screen such as XGA can be displayed in full-screen by hiding the title bar and the menu bar. Moreover, the screen size can be freely changed from other applications.
- Internal device interface functions: By using internal device interface functions, user-created applications can read/write data from/to the GOT internal devices. It is possible to link data to user applications such as a data logger in order to develop advanced systems that can run in cooperation with applications.

<Development environment of user applications>
Microsoft® Visual C++.NET2003, Microsoft® Visual C++ (Version.6.0), Microsoft® Visual Basic.NET2003, Microsoft® Visual Basic (Version.6.0)

- Startup of other applications: In full-screen mode, other applications can be started with touch switches on the monitor screen of the GT SoftGOT1000.

Connection with MELSEC instrumentation

- Now compatible with the new process control CPUs (Q02PH and Q06PHCPU).
- GT SoftGOT1000 and PX Developer monitoring tools can be connected to easily establish an instrumentation monitoring system.



PX Developer monitoring tool bar
Clicking on buttons executes various operations such as starting up the GT SoftGOT1000 and switching base screens.

GT SoftGOT1000 base screen
Make your desktop into a graphic monitoring window by displaying the GT SoftGOT1000 base screen in full-screen mode and sending the window to the back of the screen.

PX Developer face plate and other tools
Tools for monitoring, operating and tuning loop control tags. (The display position can be specified.)

GT SoftGOT1000 touch switch/object
Clicking on touch switches and objects displays various screens of PX Developer monitoring tools. (The display position can be specified.)

GT SoftGOT1000 (English version) operating environment

Item	Description	
	With DOS/V personal computer	With PC CPU module
Personal computer	PC/AT compatible PC on which Windows® 2000, Windows® XP, or Windows Vista® operates.	CONTEC PC CPU unit (PPC-852-212, PPC-852-217, PPC-852-226)*7
OS	Microsoft® Windows® 2000 Professional Operating System Service Pack 4 or later (English version)*2 *4 Microsoft® Windows® XP Professional Operating System Service Pack 2 or later (English version)*3 *4 *9 Microsoft® Windows® XP Home Edition Operating System Service Pack 2 or later (English version)*3 *4 *9 Microsoft® Windows® XP Embedded Operating System (English version)*3 *4 *8 Microsoft® Windows Vista® Ultimate Operating System (English version)*3 *4 *9 Microsoft® Windows Vista® Enterprise Operating System (English version)*3 *4 *9 Microsoft® Windows Vista® Business Operating System (English version)*3 *4 *9 Microsoft® Windows Vista® Home Premium Operating System (English version)*3 *4 *9 Microsoft® Windows Vista® Home Basic Operating System (English version)*3 *4 *9	
CPU	Other than Microsoft® Windows Vista®: Pentium2® 300MHz or higher Microsoft® Windows Vista®: 800MHz or higher (recommended: 1GHz or more)	
Required memory	Other than Microsoft® Windows Vista®: 128MB or more Microsoft® Windows Vista®: 512MB or more (recommended: 1GB or more)	
Free hard disk space*1	For installation (product only): 600MB or more	
Disk drive	CD-ROM disk drive	
Display colors	65536 colors or more	
Display	Display usable on the above OS, which has a resolution of VGA (640 × 480 dots) or higher	
Software	When creating or editing project data : GT Designer2*5 When using with PX Developer : PX Developer Version 1.13P or later GT Designer2 Version 2.45X or later	
Hardware*6	GT15-SGTKEY-U (License key (for USB port)) GT15-SGTKEY-P (License key (for parallel port))	GT15-SGTKEY-U (License key (for USB port))
Other	Internet Explorer Ver. 5.0 or higher must be installed. Mouse, keyboard, printer and CD-ROM drive usable with the above OS	

Specification

Item	
Resolution (dots)	640×480, 800×600, 1024×768, 1280×1024, 1600×1200 Specifiable resolution (640 to 1600×480 to 1200)
Display colors	65536 colors
Memory capacity	57MB
Connection configuration*10	Bus connection*11, CPU direct connection, computer link connection, CC-Link IE controller network connection, MELSECNET connection, Ethernet connection

*1 : Use of GT Designer2 and PX Developer requires additional vacant memory space. For these space requirements, refer to the GT Designer2 Version2 Basic Operation/Data Transfer Manual, and to the PX Developer Version1 Operation Manual (Monitor Tool). Additional memory space is also required when using user-created applications.
*2 : Administrator authority is required to install GT SoftGOT1000.
*3 : Administrator authority is required to install and operate GT SoftGOT1000.
*4 : The following functions are not supported.
• Compatible Mode • Fast User Switching
• Desktop Theme (Font) Change • Remote Desktop
*5 : GT Designer2 and GT SoftGOT1000 must be installed from the same GT Works2/GT Designer2.
*6 : The PC must be equipped with a USB port to use the GT15-SGTKEY-U. The PC must be equipped with a parallel port (Centro/printer connector) to use the GT15-SGTKEY-P.
*7 : For CONTEC PC CPU unit, refer to the manual for the PC CPU module.
*8 : Use is possible only when PPC-852-226 is preinstalled.
*9 : Supported only by a 32-bit OS.
*10 : The required devices vary depending on the connection configuration.
*11 : Connectable only when using a PC CPU unit.

* : Some functions are not operable on the GT SoftGOT1000. For details, see "Functions list" (page 28, 29).

MEMO

●GT16

General specifications

Item		Specification				
Operating ambient temperature*1	Display	0℃ to 50℃				
	Other than display	0℃ to 55℃				
Storage ambient temperature		-20℃ to 60℃				
Operating ambient humidity		10 to 90%RH, no condensation				
Storage ambient humidity		10 to 90%RH, no condensation				
Vibration resistance	Conforming to JIS B 3502 and IEC 61131-2		Frequency	Acceleration	Half amplitude	Sweep count
		Under intermittent vibration	5 to 9Hz	–	3.5mm	10 times in each of X, Y and Z directions
			9 to 150Hz	9.8m/s²	–	
		Under continuous vibration	5 to 9Hz	–	1.75mm	
			9 to 150Hz	4.9m/s²	–	
Impact resistance		Conforming to JIS B 3502 and IEC 61131-2 (147m/s², 3 times in each of X, Y and Z directions)				
Operating atmosphere		No corrosive gas				
Operating altitude*2		2000m or less				
Installation location		In control panel				
Overvoltage category*3		Ⅱ or lower				
Contamination level*4		2 or less				
Cooling method		Self-cooling				
Grounding		Type D grounding (100Ω or less). Connect to panel if unable to ground.				

*1 : The maximum operating ambient temperature should be 5℃ lower than that shown in the table on the left when connecting to a multimedia unit (GT16M-MMR), MELSECNET/H communication unit (GT15-J71LP23-25 or GT15-J71BR13), or CC-Link communication unit (GT15-J61BT13).
*2 : Do not operate or store the GOT unit in pressurized environments where the pressure exceeds the 0m elevation atmospheric pressure, as this could result in abnormal operation.
*3 : Assuming that the device is connected at some point between a public power distribution network and local system equipment. Category Ⅱ applies to devices that are supplied with power from fixed equipment. The surge withstand voltage is 2500V for devices with ratings up to 300V.
*4 : Index that indicates the level of foreign conductive matter in the operating environment of device. Contamination level 2 denotes contamination by non-conductive matter only, though momentary conductivity may occur due to occasional condensation.

Do not use or store the GOT under direct sun light or in an environment with excessively high temperature, dust, humidity or vibration.

Performance specifications

Item		Specification	
		GT1695M-XTBA GT1695M-XTBD	GT1685M-STBA GT1685M-STBD
Display*1	Type	TFT color LCD (high-brightness, wide viewing angle)	
	Screen size	15"	12.1"
	Resolution	XGA: 1024×768 [dots]	SVGA: 800×600 [dots]
	Display size	304.1(W)×228.1(H)[mm]	246(W)×184.5(H)[mm]
	No. of displayed characters	16-dot standard font: 64 chars.×48 lines (2-byte) 12-dot standard font: 85 chars.×64 lines (2-byte)	16-dot standard font: 50 chars.×37 lines (2-byte) 12-dot standard font: 66 chars.×50 lines (2-byte)
	Display colors	65536 colors	
	View angle*2	Right/left: 75°, Up: 50°, Down: 60°	Right/left: 80°, Up: 60°, Down: 80°
	Intensity	450 [cd/m²]	470 [cd/m²]
	Intensity adjustment	8-step adjustment	
	Life	Approx. 52,000 hours (operating ambient temperature: 25℃)	
Backlight		Cold-cathode fluorescent tube (replaceable), with backlight OFF detection function. Backlight off time and screen save time can be set.	
	Life*3	Approx. 50,000 hours or more (Time for display intensity reaches 50% at operating ambient temperature of 25℃)	
Touch panel	Type	Analog resistive type	
	Key size	Min. 2×2 [dots] (per key)	
	No. of simultaneous touch points	Simultaneous touch prohibited*4 (1 point only)	
	Life	1,000,000 times or more (operating force 0.98N or less)	
Human sensor	Detection distance	1 [m]	
	Detection range	Right/left/up/down: 70°	
	Detection delay time	0 to 4 [sec]	
	Detection temperature	Temperature difference to be 4℃ or more between human body and ambient air	
Memory*5	C drive	15MB built-in flash memory (for saving project data and OS)	
	Life (No. of writings)	100,000 times	
Battery		GT15-BAT type lithium battery	
	Backed up data	Clock data, maintenance time notification data and system log data	
	Life	Approx. 5 years (operating ambient temperature: 25℃)	
Built-in interface	RS-232	RS-232, 1ch Transmission speed: 115200/57600/38400/19200/9600/4800bps, Connector shape: D-sub 9-pin (male) Application: Communication with connected devices, connection to personal computer (project data upload/download, OS installation, FA transparent function)	
	RS-422/485	RS-422/485, 1ch Transmission speed: 115200/57600/38400/19200/9600/4800bps Connector shape: 14-pin (female) Application: Communication with connected devices	
	Ethernet	Data transfer system: 100BASE-TX, 1ch Connector shape: RJ-45 (modular jack) Application: Communication with connected devices, gateway function, connection to personal computer (project data upload/download, OS installation, MES interface function)	
	USB	USB (full-speed 12Mbps), host 1ch Connector shape: TYPE-A Application: Data transfer and storage	
		USB (full-speed 12Mbps), device 1ch Connector shape: TYPE Mini-B Application: Connection to personal computer (project data upload/download, OS installation, FA transparent function)	
	CF card	Compact flash slot, 1ch, Connector shape: TYPE Ⅰ Application: Data transfer, data storage, GOT startup	
	Optional function board	1ch for optional function board installation	
	Extension unit	2ch for communication unit/optional unit installation	
Buzzer output		Single tone (tone length adjustable)	
Protective construction		JEM1030 Front: IP67f*6 In panel: IP2X	
External dimensions (without USB port cover)		397(W)×296(H)×61(D)[mm]	316(W)×242(H)×52(D)[mm]
Panel cut dimensions		383.5(W)×282.5(H)[mm]	302(W)×228(H)[mm]
Weight (excl. mounting brackets)		5.0[kg]	2.7[kg]
Applicable software packages	Screen design software	GT Designer2 Version 2.90U or later	
	Simulation software	GT Simulator2 Version 2.90U or later	

Power supply specifications

Item	GT1695M-XTBA	GT1685M-STBA	GT1695M-XTBD	GT1685M-STBD
Input power supply voltage	100 to 240VAC (+10%, -15%)		24VDC (+25%, -20%)	
Input frequency	50/60Hz ±5%		–	
Input maximum apparent power	150VA (at max. load)	110VA (at max. load)	–	
Power consumption	64W or less	46W or less	60W or less	40W or less
With backlight off	38W or less	32W or less	30W or less	26W or less
Inrush current	26A or less (4ms, at max. load)		12A or less (75ms, at max. load)	11A or less (40ms, at max. load)
Permissible instantaneous failure time	Within 20ms (100VAC or more)		Within 10ms	
Noise resistance	Noise voltage 1500Vp-p, noise width 1μs by noise simulator with noise frequency 25 to 60Hz		Noise voltage 500Vp-p, noise width 1μs by noise simulator with noise frequency 25 to 60Hz	
Withstand voltage	1500VAC for 1 minute between power supply terminal and ground		500VDC for 1 minute between power supply terminal and ground	
Insulation resistance	10MΩ or higher with an insulation resistance tester (500VDC between power supply terminal and ground)			
Applicable wire size	0.75 to 2 [mm²]			
Clamp terminal	Clamp terminals for M3 screw RAV1.25-3, V2-S3.3, V2-N3A, FV2-N3A			
Tightening torque (terminal block's terminal screws)	0.5 to 0.8 [N·m]			

*1 : On LCD screens, bright dots (permanently lit) and black dots (not to be lit) generally appear. Because the large number of display elements exist on an LCD screen, it is not possible to reduce appearance of the bright and black dots to zero.
Flickering may occur depending on the display colors.
Note that the existence of bright and black dots is a standard characteristic of LCD screens, and it does not mean that the products are defective or damaged.
*2 : LC panels have characteristics of tone reversal. Note that even within the indicated view angles, the screen display may not be clear enough depending on the display color.
*3 : Using the GOT screen save/backlight OFF functions prevents screen burn-in and extends the backlight life.
*4 : An analog resistive touch display is used. When 2 points on the screen are touched simultaneously, if a switch is located the middle of the 2 points then the switch will be activated. Therefore, avoid touching 2 points on the screen simultaneously.
*5 : The memory is a ROM that permits overwriting of new data without having to delete the existing data.
*6 : With the USB environmentally protective cover is on, pressing firmly the portion marked " △ " makes it conform to IP67f (JEM1030). (The USB interface conforms to IP2X (JEM1030) when a USB cable or a USB memory is connected.) However, this does not guarantee protection in all users' environments.
The unit may not be used in an environment where it is exposed to splashing oil or chemicals for a long time or it is soaked with full of oil mist.

●GT15

General specifications

Item		Specification					
Operating ambient temperature*1	Display	0℃ to 50℃					
	Other than display	0℃ to 55℃					
Storage ambient temperature		-20℃ to 60℃					
Operating ambient humidity*2		10 to 90%RH, no condensation					
Storage ambient humidity*2		10 to 90%RH, no condensation					
Vibration resistance*3	Conforming to JIS B 3502 and IEC 61131-2		Frequency	Acceleration	Half amplitude	Sweep count	
		Under intermittent vibration	5 to 9Hz	–	3.5mm	10 times in each of X, Y and Z directions	
			9 to 150Hz	9.8m/s²	–		
		Under continuous vibration	5 to 9Hz	–	1.75mm		
			9 to 150Hz	4.9m/s²	–		
Impact resistance		Conforming to JIS B 3502 and IEC 61131-2 (147m/s², 3 times in each of X, Y and Z directions)					
Operating atmosphere		No corrosive gas					
Operating altitude*4		2000m or less					
Installation location		In control panel					
Overvoltage category*5		Ⅱ or lower					
Contamination level*6		2 or less					
Cooling method		Self-cooling					
Grounding		Type D grounding (100Ω or less). Connect to panel if unable to ground.					

*1 : The maximum operating ambient temperature should be 5℃ lower than that shown in the table on the left when connecting to a MELSECNET/H communication unit (GT15-J71LP23-25 or GT15-J71BR13), or CC-Link communication unit (GT15-J61BT13).
*2 : Water bulb temperature for STN display type must be 39℃ or lower.
*3 : Refer to the Communication Unit User's Manual for vibration resistance specifications when using the MELSECNET/10 communication unit (GT15-75J71LP23-Z or GT15-75J71BR13-Z) or CC-Link communication unit (GT15-75J61BT13-Z). (The specifications of communication units are different from those of the GOT main unit.)
*4 : Do not operate or store the GOT unit in pressurized environments where the pressure exceeds the 0m elevation atmospheric pressure, as this could result in abnormal operation.
*5 : Assuming that the device is connected at some point between a public power distribution network and local system equipment. Category Ⅱ applies to devices that are supplied with power from fixed equipment. The surge withstand voltage is 2500V for devices with ratings up to 300V.
*6 : Index that indicates the level of foreign conductive matter in the operating environment of device. Contamination level 2 denotes contamination by non-conductive matter only, though momentary conductivity may occur due to occasional condensation.

Do not use or store the GOT under direct sun light or in an environment with excessively high temperature, dust, humidity or vibration.

Performance specifications

Item		Specification							
		GT1595-XTBA GT1595-XTBD	GT1585V-STBA GT1585V-STBD GT1585-STBA GT1585-STBD	GT1575V-STBA GT1575V-STBD GT1575-STBA GT1575-STBD	GT1575-VTBA GT1575-VTBD	GT1575-VNBA GT1575-VNBD	GT1572-VNBA GT1572-VNBD	GT1565-VTBA GT1565-VTBD	GT1562-VNBA GT1562-VNBD
Display *1	Type	TFT color LCD (high-brightness, wide viewing angle)				TFT color LCD		TFT color LCD (high-brightness, wide viewing angle)	TFT color LCD
	Screen size	15"	12.1"	10.4"				8.4"	
	Resolution	XGA: 1024×768 [dots]	SVGA: 800×600 [dots]	VGA: 640×480 [dots]					
	Display size	304.1(W)×228.1(H) [mm]	246(W)×184.5(H) [mm]	211(W)×158(H) [mm]				171(W)×128(H) [mm]	
	No. of displayed characters	16-dot standard font: 64 chars.×48 lines (2-byte) 12-dot standard font: 85 chars.×64 lines (2-byte)	16-dot standard font: 50 chars.×37 lines (2-byte) 12-dot standard font: 66 chars.×50 lines (2-byte)	16-dot standard font: 40 chars.×30 lines (2-byte) 12-dot standard font: 53 chars.×40 lines (2-byte)					
	Display colors	65536 colors				256 colors	16 colors	65536 colors	16 colors
	View angle*6	Right/left: 75°, Up: 50°, Down: 60°	GT1585V Right/left: 60°, Up: 40°, Down: 50° GT1585 Right/left: 65°, Up: 45°, Down: 55°	Right/left/up/down: 85°	Right/left/up/down: 85°	Right/left: 45°, Up: 30°, Down: 20°		Right/left: 65°, Up: 50°, Down: 60°	Right/left: 45°, Up: 20°, Down: 20°
	Contrast adjustment	–							
	Intensity	450 [cd/m²]	GT1585V: 350 [cd/m²] GT1585: 400 [cd/m²]	400 [cd/m²]	380 [cd/m²]	200 [cd/m²]		380 [cd/m²]	150 [cd/m²]
	Intensity adjustment	8-step adjustment				4-step adjustment		8-step adjustment	4-step adjustment
	Life	Approx. 52,000 hours (operating ambient temperature: 25℃)	Approx. 50,000 hours (operating ambient temperature: 25℃)	Approx. 41,000 hours (operating ambient temperature: 25℃)					
Backlight		Cold-cathode fluorescent tube (replaceable), with backlight OFF detection function. Backlight off time and screen save time can be set.							
	Life*2	Approx. 50,000 hours or more		Approx. 40,000 hours or more (Time for display intensity reaches 50% at operating ambient temperature of 25℃)					
Touch panel	Type	Analog resistive type	Matrix resistive type						
	No. of touch keys	–	1900 keys/screen (38 lines×50 columns)	1200 keys/screen (30 lines×40 columns)					
	Key size	Min. 2×2 [dots] (per key)	Min. 16×16 [dots] (per key) (16×8 only on lowermost line)	Min. 16×16 [dots] (per key)					
	No. of simultaneous touch points	Simultaneous touch prohibited*3 (1 point only)	Max. 2 points						
	Life	1,000,000 times or more (operating force 0.98N or less)							
Human sensor	Detection distance	1 [m]	–						
	Detection range	Right/left/up/down: 70°	–						
	Detection delay time	0 to 4 [sec]	–						
	Detection temperature	Temperature difference to be 4℃ or more between human body and ambient air	–						
Memory *4	C drive	9MB built-in flash memory (for saving project data and OS)				5MB built-in flash memory (for saving project data and OS)		9MB built-in flash memory (for saving project data and OS)	5MB built-in flash memory (for saving projectdata and OS)
	Life (No. of writings)	100,000 times							
Battery		GT15-BAT type lithium battery (optional)							
	Backed up data	Clock data and maintenance time notification data							
	Life	Approx. 5 years (operating ambient temperature: 25℃)							
Built-in interface	RS-232	RS-232, 1ch, Transmission speed: 115200/57600/38400/19200/9600/4800bps, Connector shape: D-sub 9-pin (male) Application: Communication with connected devices, connection to personal computer (project data upload/download, OS installation, FA transparent function)							
	USB	USB (full-speed 12Mbps), device 1ch Connector shape: TYPE Mini-B Application: Connection to personal computer (project data upload/download, OS installation, FA transparent function)							
	CF card	Compact flash slot, 1ch, Connector shape: TYPEⅠ, Application: Data transfer, data storage, GOT startup							
	Optional function board	1ch for optional function board installation							
	Extension unit	2ch for communication unit/optional unit installation							
Buzzer output		Single tone (tone length adjustable)							
Protective construction		JEM1030 Front: IP67f*5 In panel: IP2X							
External dimensions (without USB port cover)		397(W)×296(H)×61(D) [mm]	316(W)×242(H)×52(D) [mm]	303(W)×214(H)×49(D) [mm]				241(W)×192(H)×52(D) [mm]	
Panel cut dimensions		383.5(W)×282.5(H) [mm]	302(W)×228(H) [mm]	289(W)×200(H) [mm]				227(W)×176(H) [mm]	
Weight (excl. mounting brackets)		5.0 [kg]	2.8 [kg]	GT1575V: 2.3 [kg] GT1575: 2.4 [kg]	2.4 [kg]	2.3 [kg]		1.9 [kg]	
Applicable software packages	Screen design software	GT Designer2 Version 2.90U or later							
	Simulation software	GT Simulator2 Version 2.90U or later							

Power supply specifications

Item	Specification									
	GT1595-XTBA	GT1585V-STBA GT1585-STBA	GT1575V-STBA GT1575-STBA GT1575-VTBA GT1575-VNBA GT1572-VNBA GT1565-VTBA GT1562-VNBA	GT1595-XTBD	GT1585V-STBD GT1585-STBD	GT1575V-STBD GT1575-STBD GT1575-VTBD GT1575-VNBD GT1572-VNBD GT1565-VTBD GT1562-VNBD	GT1555-VTBD	GT1555-QTBD	GT1555-QSBD	GT1550-QLBD
Input power supply voltage	100 to 240VAC (+10%, -15%)			24VDC (+25%, -20%)						
Input frequency	50/60Hz ±5%			–						
Input maximum apparent power	110VA (at max. load)			–						
Power consumption	56W or less	41W or less	39W or less	57W or less (2380mA/24VDC)	43W or less (1790mA/24VDC)	41W or less (1710mA/24VDC)	19W or less (790mA/24VDC)	18W or less (750mA/24VDC)	17W or less (710mA/24VDC)	15W or less (620mA/24VDC)
With backlight off	30W or less	28W or less	28W or less	32W or less (1330mA/24VDC)	30W or less (1250mA/24VDC)	30W or less (1250mA/24VDC)	14W or less (580mA/24VDC)	13W or less (540mA/24VDC)		
Inrush current	50A or less (4ms, at max. load)	45A or less (4ms, at max. load)	40A or less (4ms, at max. load)	100A or less (4ms, at max. load)	115A or less (1ms, at max. load)	115A or less (1ms, at max. load)	67A or less (1ms, at max. load)	60A or less (1ms, at max. load)		
Permissible instantaneous failure time	Within 20ms (100VAC or more)			Within 10ms						
Noise resistance	Noise voltage 1500Vp-p, noise width 1µs by noise simulator with noise frequency 25 to 60Hz			Noise voltage 500Vp-p, noise width 1µs by noise simulator with noise frequency 25 to 60Hz						
Withstand voltage	1500VAC for 1 minute between power supply terminal and ground			500VDC for 1 minute between power supply terminal and ground						
Insulation resistance	10MΩ or higher with an insulation resistance tester (500VDC between power supply terminal and ground)									
Applicable wire size	0.75 to 2 [mm^2]									
Clamp terminal	Clamp terminals for M3 screw RAV1.25-3, V2-S3.3, V2-N3A, FV2-N3A									
Tightening torque (terminal block's terminal screws)	0.5 to 0.8 [N·m]									

Performance specifications

Item		Specification			
		GT1555-VTBD	GT1555-QTBD	GT1555-QSBD	GT1550-QLBD
Display *1	Type	TFT color LCD (high-brightness, wide viewing angle)		STN color LCD	STN monochrome (black/white) LCD
	Screen size	5.7"			
	Resolution	VGA: 640×480 [dots]	QVGA: 320×240 [dots]		
	Display size	115(W)×86(H) [mm]			
	No. of displayed characters	16-dot standard font: 40 chars. ×30 lines (2-byte) 12-dot standard font: 53 chars. ×40 lines (2-byte)	16-dot standard font: 20 chars.× 15 lines (2-byte) 12-dot standard font: 26 chars.× 20 lines (2-byte)		
	Display colors	65536 colors		4096 colors	Monochrome 16 gray scale
	View angle*6	Right/left: 80˚, Up: 80˚, Down: 70˚	Right/left: 70˚, Up: 70˚, Down: 50˚	Right/left: 55˚, Up: 65˚, Down: 70˚	Right/left: 45˚, Up: 20˚, Down: 40˚
	Contrast adjustment	–		16-step adjustment	
	Intensity	350 [cd/m^2]	400 [cd/m^2]	380 [cd/m^2]	220 [cd/m^2]
	Intensity adjustment	8-step adjustment			
	Life	Approx. 50,000 hours (operating ambient temperature: 25˚C)			
Backlight		Cold-cathode fluorescent tube (not replaceable), with backlight OFF detection function. Backlight off time and screen save time can be set.			
	Life*2	Approx. 75,000 hours or more			Approx. 58,000 hours or more
		(Time for display intensity reaches 50% at operating ambient temperature of 25˚C)			
Touch panel *7	Type	Matrix resistive type			
	No. of touch keys	1200 keys/screen (30 lines×40 columns)	300 keys/screen (15 lines×20 columns)		
	Key size	Min. 16×16 [dots] (per key)			
	No. of simultaneous touch points	Max. 2 points			
	Life	1,000,000 times or more (operating force 0.98N or less)			
Human sensor	Detection distance	–			
	Detection range	–			
	Detection delay time	–			
	Detection temperature	–			
Memory *4	C drive	9MB built-in flash memory (for saving project data and OS)			
	Life (No. of writings)	100,000 times			
Battery		GT15-BAT type lithium battery (optional)			
	Backed up data	Clock data and maintenance time notification data			
	Life	Approx. 5 years (operating ambient temperature: 25˚C)			
Built-in interface	RS-232	RS-232, 1ch, Transmission speed: 115200/57600/38400/19200/9600/4800bps Connector shape: D-sub 9-pin (male) Application: Communication with connected devices, connection to personal computer (project data upload/download, OS installation, FA transparent function)			
	USB	USB (full-speed 12Mbps), device 1ch, Connector shape: TYPE Mini-B Application: Connection to personal computer (project data upload/download, OS installation, FA transparent function)			
	CF card	Compact flash slot, 1ch, Connector shape: TYPE I Application: Data transfer, data storage, GOT startup			
	Optional function board	1ch for optional function board installation			
	Extension unit	1ch for communication unit/optional unit installation			
Buzzer output		Single tone (tone length adjustable)			
Protective construction		JEM1030 Front: IP67f*5 In panel: IP2X			
External dimensions (without USB port cover)		167(W)×135(H)×60(D) [mm]			
Panel cut dimensions		153(W)×121(H) [mm]			
Weight (excl. mounting brackets)		1.1 [kg]			
Applicable software packages	Screen design software	GT Designer2 Version 2.90U or later			
	Simulation software	GT Simulator2 Version 2.90U or later			

*1 : On LCD screens, bright dots (permanently lit) and black dots (not to be lit) generally appear. Because the large number of display elements exist on an LCD screen, it is not possible to reduce appearance of the bright and black dots to zero.
Flickering may occur depending on the display colors.
Note that the existence of bright and black dots is a standard characteristic of LCD screens, and it does not mean that the products are defective or damaged.

*2 : Using the GOT screen save/backlight OFF functions prevents screen burn-in and extends the backlight life.

*3 : An analog resistive touch display is used. When 2 points on the screen are touched simultaneously, if a switch is located the middle of the 2 points then the switch will be activated. Therefore, avoid touching 2 points on the screen simultaneously.

*4 : The memory is a ROM that permits overwriting of new data without having to delete the existing data.

*5 : With the USB environmentally protective cover is on, the main unit conforms to IP67f (JEM1030). (The USB interface conforms to IP2X (JEM1030) when a USB cable is connected.) However, this does not guarantee protection in all users' environments.
The unit may not be used in an environment where it is exposed to splashing oil or chemicals for a long time or it is soaked with full of oil mist.
LC panels have characteristics of tone reversal. Note that even within the indicated view

*6 : angles, the screen display may not be clear enough depending on the display color.
The GT1555-VTBD can be operated with a stylus pen.

*7 : Using a stylus pen enables touching small switches without fault.
Use a stylus pen within the following specifications.
• Material: Polyacetal resin
• Point tip radius: 0.8mm or more

●GT11

General specifications

Item		Specification					
Operating ambient temperature	Display	0℃ to 50℃*5					
	Other than display	0 C to 55 C (horizontal installation), 0℃ to 50℃ (vertical installation)*5					
Storage ambient temperature		-20℃ to 60℃					
Operating ambient humidity*1		10 to 90%RH, no condensation					
Storage ambient humidity*1		10 to 90%RH, no condensation					
Vibration resistance		Conforming to JIS B 3502 and IEC 61131-2		Frequency	Acceleration	Half amplitude	Sweep count
			Under intermittent vibration	5 to 9Hz	–	3.5mm	10 times in each of X, Y and Z directions
				9 to 150Hz	9.8m/s²	–	
			Under continuous vibration	5 to 9Hz	–	1.75mm	
				9 to 150Hz	4.9m/s²	–	
Impact resistance		Conforming to JIS B 3502 and IEC 61131-2 (147m/s², 3 times in each of X, Y and Z directions)					
Operating atmosphere		Free from oil mist, corrosive gases, flammable gases and excessive conductive dusts or direct sun beams (The same applies to unit storage.)					
Operating altitude*2		2000m or less					
Installation location		In control panel*6					
Overvoltage category*3		or lower					
Contamination level*4		2 or less					
Cooling method		Self-cooling					
Grounding		Type D grounding (100 or less). Connect to panel if unable to ground.*7					

*1 : Water bulb temperature for STN display type must be 39℃ or lower.
*2 : Do not operate or store the GOT unit in pressurized environments where the pressure exceeds the 0m elevation atmospheric pressure, as this could result in abnormal operation.
*3 : Assuming that the device is connected at some point between a public power distribution network and local system equipment. Category applies to devices that are supplied with power from fixed equipment. The surge withstand voltage is 2500V for devices with ratings up to 300V.
*4 : Index that indicates the level of foreign conductive matter in the operating environment of device. Contamination level 2 denotes contamination by non-conductive matter only, though momentary conductivity may occur due to occasional condensation.
*5 : 0 to 40℃ for GT115HS
*6 : Excluding GT115HS
*7 : The 5VDC type requires no grounding.

Performance specifications

Item		Specification							
		GT1155-QTBD	GT1155-QSBD	GT1150-QLBD	GT1155HS-QSBD	GT1150HS-QLBD	GT1155-QTBDQ GT1155-QTBDA	GT1155-QSBDQ GT1155-QSBDA	GT1150-QLBDQ GT1150-QLBDA
Display*1	Type	TFT color LCD	STN color LCD	STN monochrome (black/white) LCD	STN color LCD	STN monochrome (black/white) LCD	TFT color LCD	STN color LCD	STN monochrome (black/white) LCD
	Screen size	5.7"							
	Resolution	QVGA: 320×240 [dots]							
	Display size	115(W)×86(H) [mm] (in horizontal display mode)			115(W)×86(H) [mm]		115(W)×86(H) [mm] (in horizontal display mode)		
	No. of displayed characters	16-dot standard font: 20 chars.×15 lines (2-byte) 12-dot standard font: 26 chars.×20 lines (2-byte) (in horizontal display mode)							
	Display colors	256 colors		Monochrome (black/white) 16 gray scale	256 colors	Monochrome (black/white) 16 gray scale	256 colors		Monochrome (black/white) 16 gray scale
	View angle	Right/left: 70°, Up: 70°, Down: 50° (in horizontal display mode)	• Right/left: 50°, Up: 50°, Down: 60° (Hardware versions A and B) (In horizontal display mode) • Right/left: 55°, Up: 65°, Down: 70° (Hardware version C or later) (In horizontal display mode)	Right/left: 45°, Up: 20°, Down: 40° (in horizontal display mode)	• Right/left: 50°, Up: 50°, Down: 60° (Hardware versions A and B) • Right/left: 55°, Up: 65°, Down: 70° (Hardware version C or later)	Right/left: 45°, Up: 20°, Down: 40°	Right/left: 70°, Up: 70°, Down: 50° (in horizontal display mode)	Right/left: 55°, Up: 65°, Down: 70° (in horizontal display mode)	Right/left: 45°, Up: 20°, Down: 40° (in horizontal display mode)
	Contrast adjustment	–	16-step adjustment				–	16-step adjustment	
	Intensity	400 [cd/m²]	• 350 [cd/m²] (Hardware versions A and B) • 380 [cd/m²] (Hardware version C or later)	220 [cd/m²]	• 350 [cd/m²] (Hardware versions A and B) • 380 [cd/m²] (Hardware version C or later)	220 [cd/m²]	400 [cd/m²]	380 [cd/m²]	220 [cd/m²]
	Intensity adjustment	8-step adjustment							
	Life	Approx. 50,000 hours (operating ambient temperature: 25℃)							
Backlight		Cold-cathode fluorescent tube (not replaceable), with backlight OFF detection function. Backlight off time and screen save time can be set.							
	Life*2	Approx. 75,000 hours or more		Approx. 54,000 hours or more	Approx. 75,000 hours or more	Approx. 54,000 hours or more	Approx. 75,000 hours or more		Approx. 54,000 hours or more
		(Time for display intensity reaches 50% at operating ambient temperature of 25℃)							
Touch panel	Type	Matrix resistive type							
	No. of touch keys	300 keys/screen (matrix consisting of 15 lines×20 columns)							
	Key size	Min. 16×16 [dots] (per key)							
	No. of simultaneous touch points	Max. 2 points							
	Life	1,000,000 times or more (operating force 0.98N or less)							
Memory	C drive*3	3MB built-in flash memory (for saving project data and OS)							
	Life (No. of writings)	100,000 times							
	D drive	512KB built-in SRAM (battery backup)							
Battery		GT11-50BAT type lithium battery							
	Backed up data	Clock data, alarm history and recipe data							
	Life	Approx. 5 years (operating ambient temperature: 25℃)							
Built-in interface	Bus	–					1ch for QCPU (Q mode)/motion controller CPU (Q series) or 1ch for QnA/ACPU/motion controller CPU (A series) Application: For bus connection of PLC		
	RS-422	RS-422, 1ch, Transmission speed: 115200/57600/38400/19200/9600/4800bps Connector shape: D-sub 9-pin (female) Application: Communication with connected devices			–		–		
	RS-422/232	–			RS-422/232, 1ch (Select one when using.) Transmission speed: 115200/57600/38400/19200/9600/4800bps, Connector shape: Round type, 32-pin (male) Application: Communication with connected devices		–		
	RS-232	RS-232, 1ch, Transmission speed: 115200/57600/38400/19200/9600/4800bps, Connector shape: D-sub 9-pin (male) Application: Communication with connected devices, connection to personal computer (project data upload/download, OS installation, FA transparent function, etc.)			RS-232, 1ch, Transmission speed: 115200/57600/38400/19200/9600/4800bps, Connector shape: Mini-DIN 9-pin (female) Application: Connection to personal computer (project data upload/download, OS installation, FA transparent function, etc.)		RS-232, 1ch, Transmission speed: 115200/57600/38400/19200/9600/4800bps, Connector shape: D-sub 9-pin (male) Application: Connection to barcode reader/personal computer (project data upload/download, OS installation, FA transparent function, etc.)		
	USB	USB (full-speed 12Mbps), device 1ch Application: Connection to personal computer (project data upload/download, OS installation, FA transparent function)							
	CF card	Compact flash slot, 1ch, Connector shape: TYPE Application: Data transfer and data storage							
	Optional function board	(Embedded in main unit)	1ch for optional function board installation				(Embedded in main unit)		
Buzzer output		Single tone (tone length adjustable)							
Protective construction*4		JEM1030 Front: IP67f In panel: IP2X			JEM1030 Front: IP65f		JEM1030 Front: IP67f In panel: IP2X		
External dimensions (without USB port cover)		164(W)×135(H)×56(D) [mm]			176(W)×220(H)×93(D) [mm]		167(W)×135(H)×65(D) [mm]		
Panel cut dimensions		153(W)×121(H) [mm]			–		153(W)×121(H) [mm]		
Weight		0.7 [kg] (excl. mounting brackets)			1.0 [kg] (main unit only)		0.9 [kg] (excl. mounting brackets)		
Applicable software packages	Screen design software	GT Designer2 Version 2.90U or later							
	Simulation software	GT Simulator2 Version 2.90U or later							

Power supply specifications

Item	Specification				
	GT1155-QTBD GT1155-QSBD GT1155HS-QSBD	GT1150-QLBD GT1150HS-QLBD	GT1155-QTBDQ GT1155-QTBDA	GT1155-QSBDQ GT1155-QSBDA	GT1150-QLBDQ GT1150-QLBDA
Input power supply voltage	24VDC (+10%, -15%), ripple voltage of 200mV or less				
Input frequency	–				
Input maximum apparent power	–				
Power consumption	9.84W or less (410mA/24VDC)	9.36W or less (390mA/24VDC)	11.16W or less (465mA/24VDC)	9.72W or less (405mA/24VDC)	7.92W or less (330mA/24VDC)
With backlight off	4.32W or less (180mA/24VDC)		5.04W or less (210mA/24VDC)		
Inrush current	15A or less (2ms, at max. load)		26A or less (4ms, at max. load)		
Permissible instantaneous failure time	Within 5ms		Within 10ms		
Noise resistance	Noise voltage 1000Vp-p, noise width 1µs by noise simulator with noise frequency 30 to 100Hz		Noise voltage 500Vp-p, noise width 1µs by noise simulator with noise frequency 25 to 60Hz		
Withstand voltage	500VAC for 1 minute between power supply terminal and ground				
Insulation resistance	10MΩ or higher with an insulation resistance tester (500VDC between power supply terminal and ground)				
Applicable wire size	0.75 to 2 [mm^2]*1				
Clamp terminal	Clamp terminals for M3 screw RAV1.25-3, V2-N3A, FV2-N3A*1				
Tightening torque (terminal block's terminal screws)	0.5 to 0.8 [N·m]*1				

*1 : Excluding GT115□HS

●GT10

General specifications

Item		Specification					
Operating ambient temperature	Display	0 C to 50 C*5					
	Other than display	0 C to 55 C (horizontal installation), 0 C to 50 C (vertical installation)*5					
Storage ambient temperature		-20 C to 60 C					
Operating ambient humidity*1		10 to 90%RH, no condensation					
Storage ambient humidity*1		10 to 90%RH, no condensation					
Vibration resistance	Conforming to JIS B 3502 and IEC 61131-2		Frequency	Acceleration	Half amplitude	Sweep count	
		Under intermittent vibration	5 to 9Hz	–	3.5mm	10 times in each of X, Y and Z directions	
			9 to 150Hz	9.8m/s^2	–		
		Under continuous vibration	5 to 9Hz	–	1.75mm		
			9 to 150Hz	4.9m/s^2	–		
Impact resistance	Conforming to JIS B 3502 and IEC 61131-2 (147m/s^2, 3 times in each of X, Y and Z directions)						
Operating atmosphere	Free from oil mist, corrosive gases, flammable gases and excessive conductive dusts or direct sun beams (The same applies to unit storage.)						
Operating altitude*2	2000m or less						
Installation location	In control panel*6						
Overvoltage category*3	II or lower						
Contamination level*4	2 or less						
Cooling method	Self-cooling						
Grounding	Type D grounding (100Ω or less). Connect to panel if unable to ground.*7						

*1 : Water bulb temperature for STN display type must be 39 C or lower.
*2 : Do not operate or store the GOT unit in pressurized environments where the pressure exceeds the 0m elevation atmospheric pressure, as this could result in abnormal operation.
*3 : Assuming that the device is connected at some point between a public power distribution network and local system equipment. Category II applies to devices that are supplied with power from fixed equipment. The surge withstand voltage is 2500V for devices with ratings up to 300V.
*4 : Index that indicates the level of foreign conductive matter in the operating environment of device. Contamination level 2 denotes contamination by non-conductive matter only, though momentary conductivity may occur due to occasional condensation.
*5 : 0 to 40 C for GT115 HS
*6 : Excluding GT115 HS
*7 : The 5VDC type requires no grounding.

Performance specifications<GT105 >

Item		Specification	
		GT1055-QSBD	GT1050-QBBD
Display*1	Type	STN color LCD	STN monochrome (blue/white) LCD
	Screen size	5.7"	
	Resolution	QVGA: 320×240 [dots]	
	Display size	115(W)×86(H) [mm] (in horizontal display mode)	
	No. of displayed characters	16-dot standard font: 20 chars. ×15 lines (2-byte), 12-dot standard font: 26 chars.×20 lines (2-byte) (in horizontal display mode)	
	Display colors	256 colors	Monochrome (blue/white) 16 gray scale
	View angle	Right/left: 55°, Up: 65°, Down: 70° (in horizontal display mode)	Right/left: 45°, Up: 20°, Down: 40° (in horizontal display mode)
	Contrast adjustment	16-step adjustment	
	Intensity	380 [cd/m^2]	260 [cd/m^2]
	Life*2	Approx. 50,000 hours (Time for display contrast reaches 20% at operating ambient temperature of 25 C) Guarantee one year	
Backlight		Cold-cathode fluorescent tube (not replaceable) with backlight OFF detection function. Backlight off time and screen save time can be set.	
	Life	Approx. 75,000 hours or more	Approx. 54,000 hours or more
		(Time for display intensity reaches 50% at operating ambient temperature of 25 C) Guarantee one year	
Touch panel	Type	Matrix resistive type	
	No. of touch keys	Max. 50 keys/screen	
	Key size	Min. 16×16 [dots] (per key)	
	No. of simultaneous touch points	Max. 2 points	
	Life	1,000,000 times or more (operating force 0.98N or less)	
Memory	User memory*3	Built-in flash ROM for saving project data (3 MB or less) and OS	
	Life (No. of writings)	100,000 times	
Battery		GT11-50BAT type lithium battery	
	Backed up data	Clock data, alarm history and recipe data	
	Life	Approx. 5 years (operating ambient temperature: 25 C) Guaranteed life: within one year after date of manufacture	
Built-in interface	RS-422	RS-422, 1ch, Transmission speed: 115200/57600/38400/19200/9600/4800bps Connector shape: D-sub 9-pin (female) Application: Communication with PLCs	
	RS-232	RS-232, 1ch, Transmission speed: 115200/57600/38400/19200/9600/4800bps Connector shape: D-sub 9-pin (male) Application: Communication with PLCs, connection with barcode readers, communication with personal computers (project data upload/download, OS installation, transparent function)	
	USB	USB (full-speed 12Mbps), device 1ch Connector shape: TYPE Mini-B (receptacle) Application: Communication with personal computer (project data upload/download, OS installation, transparent function)	
	Memory board	For installing memory board (GT10-50FMB) 1ch	
Buzzer output		Single tone (tone length adjustable/none)	
Protective construction*4		Conforming to IP67f (JEM1030) (front panel)	
External dimensions		164(W)×135 (H)× 56 (D)[mm]	
Panel cut dimensions		153(W)×121(H)[mm]	
Weight		0.7kg (excl. mounting brackets)	
Applicable software package		GT Designer2 Version 2.90U or later	

*1 : On LCD screens, bright dots (permanently lit) and black dots (not to be lit) generally appear. Because the large number of display elements exist on an LCD screen, it is not possible to reduce appearance of the bright and black dots to zero.
Flickering may occur depending on the display colors.
Note that the existence of bright and black dots is a standard characteristic of LCD screens, and it does not mean that the products are defective or damaged.
*2 : Using the GOT screen save/backlight OFF functions prevents screen burn-in and extends the backlight life.
*3 : The memory is a ROM that permits overwriting of new data without having to delete the existing data.
*4 : This does not guarantee protection in all users' environments. The specification is not applied when the interface protective cover and rear face protective cover are removed.

Power supply specifications<GT105 >

Item	Specification	
	GT1055-QSBD	GT1050-QBBD
Input power supply voltage	24VDC (+10%, -15%), ripple voltage of 200mV or less	
Input frequency	–	
Input maximum apparent power	–	
Power consumption	9.84W or less (410mA/24VDC)	9.36W or less (390mA/24VDC)
With backlight off	4.32W or less (180mA/24VDC)	
Inrush current	15A or less (26.4V) 2ms	
Permissible instantaneous failure time	Within 5ms	
Noise resistance	Noise voltage 1000Vp-p, noise width 1μs by noise simulator with noise frequency 30 to 100Hz	
Withstand voltage	500VAC for 1 minute between power supply terminal and ground	
Insulation resistance	10MΩ or higher with an insulation resistance tester (500VDC between power supply terminal and ground)	
Applicable wire size	0.75 to 2 [mm^2]*1	
Clamp terminal	Clamp terminals for M3 screw RAV1.25-3, V2-N3A, FV2-N3A*1	
Tightening torque (terminal block's terminal screws)	0.5 to 0.8 [N·m]*1	

*1 : Excluding GT115 HS

Power supply specifications<GT1030, GT1020>

Item		Specification		
		GT1030-LBD GT1030-LBDW GT1030-LWD GT1030-LWDW GT1030-LBD2 GT1030-LBDW2 GT1030-LWD2 GT1030-LWDW2	GT1020-LBD GT1020-LBDW GT1020-LWD GT1020-LWDW GT1020-LBD2 GT1020-LBDW2 GT1020-LWD2 GT1020-LWDW2	GT1020-LBL GT1020-LWL GT1020-LBLW GT1020-LWLW
Input power supply voltage		24VDC (+10%, -15%), ripple voltage of 200mV or less		5VDC (±5%), supplied from PLC communication cable
Input frequency		–		
Input maximum apparent power		–		
Power consumption		2.2W or less (90mA/24VDC)	1.9W or less (80mA/24VDC)	1.1W or less (220mA/5VDC)
	With backlight off	1.7W or less (70mA/24VDC)	1.2W or less (50mA/24VDC)	0.6W or less (120mA/5VDC)
Inrush current		18A or less (26.4DCV) 1ms	13A or less (26.4DCV) 1ms	–
Permissible instantaneous failure time		Within 5ms		–
Noise resistance		Noise voltage 1000Vp-p, noise width 1µs by noise simulator with noise frequency 30 to 100Hz		
Withstand voltage		500VAC for 1 minute between power supply terminal and ground		–
Insulation resistance		10MΩ or higher with an insulation resistance tester (500VDC between power supply terminal and ground)		–
Applicable wire size	Single-wire installation	0.14 to 1.5mm², AWG26 to AWG16 (single wire), 0.14 to 1.0mm², AWG26 to AWG16 (stranded wire) 0.25 to 0.5mm², AWG24 to AWG20 (bar terminal with insulation sleeve)		
	Two-wire installation	0.14 to 0.5mm², AWG26 to AWG20 (single wire), 0.14 to 0.2mm², AWG26 to AWG24 (stranded wire)		
Clamp terminal		AI2.5-6BU, AI0.34-6TQ, AI0.5-6WH (made by Phoenix Contact)		
Tightening torque (terminal block's terminal screws)		0.22 to 0.25 [N·m]		

Performance specifications<GT1030, GT1020>

Item		Specification							
		GT1030-LBD GT1030-LWD	GT1030-LBDW GT1030-LWDW	GT1030-LBD2 GT1030-LWD2	GT1030-LBDW2 GT1030-LWDW2	GT1020-LBD GT1020-LWD GT1020-LBL GT1020-LWL	GT1020-LBDW GT1020-LWDW GT1020-LBLW GT1020-LWLW	GT1020-LBD2 GT1020-LWD2	GT1020-LBDW2 GT1020-LWDW2
Display*1	Type	STN monochrome (black/white) LCD							
	Screen size	4.5"				3.7"			
	Resolution	288×96 [dots] (in horizontal mode)				160×64 [dots] (in horizontal mode)			
	Display size	109.42(W)×35.98(H)[mm](in horizontal mode)				86.4(W)×34.5(H)[mm](in horizontal mode)			
	No. of displayed characters	16-dot standard font: 36 chars.×6 lines (1-byte) or 18 chars.×6 lines (2-byte) (in horizontal mode) 12-dot standard font: 48 chars.×8 lines (1-byte) or 24 chars.×8 lines (2-byte) (in horizontal mode)				16-dot standard font: 20 chars.×4 lines (1-byte) or 10 chars.×4 lines (2-byte) (in horizontal mode)			
	Display colors	Monochrome (black/white)							
	View angle	Right/left: 30°, Up: 20°, Down: 30°(in horizontal display mode)							
	Contrast adjustment	16-step adjustment							
	Intensity	200 [cd/m²] (in green)	300 [cd/m²] (in white)	200 [cd/m²] (in green)	300 [cd/m²] (in white)	200 [cd/m²] (in green)	300 [cd/m²] (in white)	200 [cd/m²] (in green)	300 [cd/m²] (in white)
	Intensity adjustment	8-step adjustment				–			
	Life*2	Approx. 50,000 hours (Time for display contrast reaches 20% at operating ambient temperature of 25℃)							
Backlight	Color	3-color LED (green, orange and red) (replacement not needed)	3-color LED (white, pink and red) (replacement not needed)	3-color LED (green, orange and red) (replacement not needed)	3-color LED (white, pink and red) (replacement not needed)	3-color LED (green, orange and red) (replacement not needed)	3-color LED (white, pink and red) (replacement not needed)	3-color LED (green, orange and red) (replacement not needed)	3-color LED (white, pink and red) (replacement not needed)
	Function	Status control (color, on/flashing/off) is available and screen save time setting can be set. PLC can control color and status of backlight based on system information.							
Touch panel	Type	Matrix resistive type				Analog resistive type			
	No. of touch keys	Max. 50 keys/screen							
	Key size	Min. 16×16 [dots] (per key)				Min. 2×2 [dots] (per key)			
	No. of simultaneous touch points	Max. 2 points				Impossible (If there is a switch near the center of the pressed keys, the switch may function.)			
	Life	1,000,000 times or more (operating force 0.98N or less)							
Memory	User memory*3	Built-in flash ROM for saving project data (1.5MB or less) and OS				Built-in flash ROM for saving project data (512KB or less), OS, alarm history and recipe data			
	Life (No. of writings)	100,000 times							
Battery		GT11-50BAT type lithium battery				–			
	Backed up data	Clock data, alarm history and recipe data				–			
	Life	Approx. 5 years (operating ambient temperature: 25℃) Guaranteed life: within one year after date of manufacture				–			
Built-in interface	For communication with PLC	RS-422, 1ch, Transmission speed: 115200/57600/38400/19200/9600/4800bps, Connector shape: Connecter terminal block, 9-pin Application: Communication with PLC		RS-232, 1ch, Transmission speed: 115200/57600/38400/19200/9600/4800bps, Connector shape: Connecter terminal block, 9-pin Application: Communication with PLC		RS-422, 1ch, Transmission speed: 115200/57600/38400/19200/9600/4800bps, Connector shape: Connecter terminal block, 9-pin Application: Communication with PLC		RS-232, 1ch, Transmission speed: 115200/57600/38400/19200/9600/4800bps, Connector shape: Connecter terminal block, 9-pin Application: Communication with PLC	
	For communication with personal computer	RS-232, 1ch, Transmission speed: 115200/57600/38400/19200/9600/4800bps Connector shape: Mini DIN 6-pin (female) Application: Communication with personal computer (project data upload/download, OS installation, transparent function)							
Buzzer output		Single tone (tone length adjustable/none)							
Protective construction*4		Conforming to IP67f (JEM1030) (front panel)							
External dimensions		145(W)×76(H)×29.5(D)[mm]				113(W)×74(H)×27(D)[mm]			
Panel cut dimensions		137(W)×66(H)[mm]				105(W)×66(H)[mm]			
Weight		0.3kg (excl. mounting brackets)				GT1020-L□D(W): 0.2kg (excl. mounting brackets) GT1020-L□L(W): 0.18kg (excl. mounting brackets)		0.2kg (excl. mounting brackets)	
Applicable software package		GT Designer2 Version 2.90U or later							

*1 : On LCD screens, bright dots (permanently lit) and black dots (not to be lit) generally appear. Because the large number of display elements exist on an LCD screen, it is not possible to reduce appearance of the bright and black dots to zero.
Flickering may occur depending on the display colors.
Note that the existence of bright and black dots is a standard characteristic of LCD screens, and it does not mean that the products are defective or damaged.

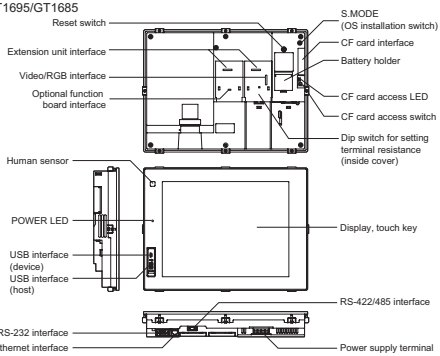
*2 : Using the GOT screen save/backlight OFF functions prevents screen burn-in and extends the backlight life.

*3 : The memory is a ROM that permits overwriting of new data without having to delete the existing data.

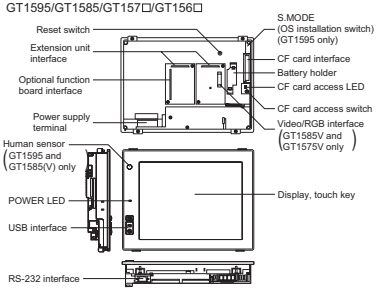
*4 : This does not guarantee protection in all users' environments.

1.3 Part Name

GT1695/GT1685

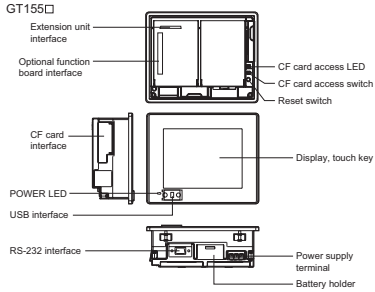


GT1595/GT1585/GT157□/GT156□

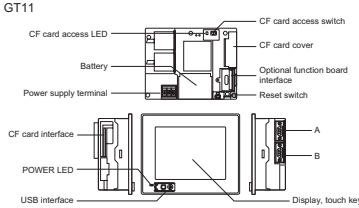


* : This illustration shows GT1585V-STBA.

GT155□



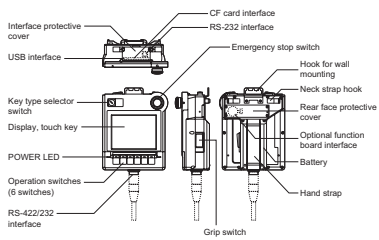
GT11



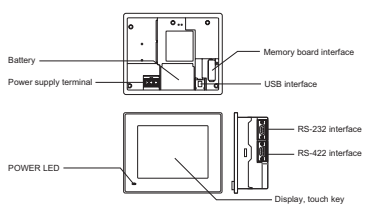
	GT115□-Q□BD	GT115□-Q□BDQ GT115□-Q□BDA
A	RS-232 interface	Bus interface
B	RS-422 interface	RS-232 interface

* : GT115□-Q□BDQ and GT115□-Q□BDA do not have optional function board interface and reset switch.

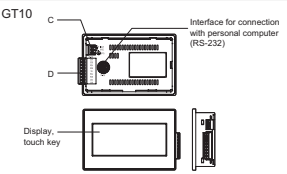
Handy GOT



GT105□



GT10



	GT1030-LBD GT1030-LWD GT1030-LBDW GT1030-LWDW GT1020-LBD GT1020-LWD GT1020-LBDW GT1020-LWDW	GT1020-LBL GT1020-LWL GT1020-LBLW GT1020-LWLW	GT1030-LBD2 GT1020-LBD2 GT1030-LWD2 GT1020-LWD2 GT1030-LBDW2 GT1020-LBDW2 GT1030-LWDW2 GT1020-LWDW2
C	Power supply terminal	–	Power supply terminal
D	RS-422 interface	RS-422 interface, Power supply terminal	RS-232 interface

■Panel cut dimensions

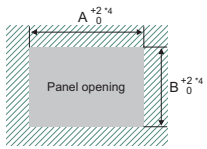
●When GOT is installed

(Unit: mm)

Screen size	Type of GOT main unit	A	B
15"	GT1695	383.5	282.5
	GT1595		
12.1"	GT1685	302	228
	GT1585*1		
10.4"	GT157□ *2	289	200
8.4"	GT156□	227	176
5.7"	GT155□ *3	153	121
	GT115□ *3		
	GT105□		
4.5"	GT1030	137	66
3.7"	GT1020	105	66

*1 : Same dimensions as A985GOT(-V)
*2 : Same dimensions as A975/970GOT(-B)
*3 : Same dimensions as F940GOT
*4 : For the GT1030 and GT1020, the tolerance is +1/0.

For compatibility with GOT900 series, see "3.2 Precaution for Use".



●When CF card extension unit (mounting unit on control panel) is installed

Type	A	B
GT15-CFEX-C08SET	94.0	33.0

●Cautions when installing and uninstalling

When installing the CF card extension unit on the control panel, make sure that the extension unit does not interfere with the extension unit cable or the CF card interface of the GOT. Place the CF card extension unit at a distance of 25mm or more from the GOT.
For installation locations, see the GT15 User's Manual.

■Product installation interval

The GOT must have the clearances from other devices as shown in [Fig. A]. The GOT may require more distance than the dimensions shown in the table depending on the types of connection cables. Consider the connector dimensions and radius of cable bending curvature when designing the installation.

●GT16/GT15

(Unit: mm)

Item		GT1695	GT1685	GT1595	GT1585	GT157□	GT156□	GT155□
A	GOT only	50 or more (20 or more)				50 or more (31 or more)	50 or more (36 or more)	65 or more
	When bus connection unit is installed							
	When serial communication unit is installed							
	When RS-422 conversion unit is installed	50 or more	51 or more	50 or more	51 or more	68 or more	73 or more	–
	When Ethernet communication unit is installed	–		50 or more (20 or more)				50 or more (40 or more)
	When CC-Link communication unit (GT15-J61BT13) is installed	50 or more (20 or more)						50 or more (32 or more)
	When CC-link IE controller network communication unit is installed	50 or more (20 or more)						
	When MELSECNET/H communication unit (coaxial) is installed	50 or more (20 or more)	50 or more (24 or more)	50 or more (20 or more)	50 or more (24 or more)	50 or more (38 or more)	50 or more	72 or more
	When MELSECNET/H communication unit (optical) is installed	50 or more (20 or more)*1						
	When printer unit is installed	50 or more (20 or more)				50 or more (31 or more)	50 or more (36 or more)	50 or more
	When multimedia unit is installed	50 or more (20 or more)		–				
	When video input unit is installed (GT16M-V4)	50 or more (20 or more)		–				
	When video input unit is installed (GT15V-75V4)	–			50 or more (20 or more)*2		–	
	When RGB input unit is installed (GT16M-R2)	50 or more (20 or more)		–				
	When RGB input unit is installed (GT15V-75R1)	–			50 or more (20 or more)*3		–	
	When video/RGB input unit is installed (GT16M-V4R1)	50 or more (20 or more)		–				
	When video/RGB input unit is installed (GT15V-75V4R1)	–			50 or more (20 or more)*3		–	
	When RGB output unit is installed (GT16M-ROUT)	50 or more (20 or more)		–				
	When RGB output unit is installed (GT15V-75ROUT)	–			50 or more (20 or more)*3		–	
	When CF card unit is installed	50 or more (20 or more)				50 or more (31 or more)	50 or more (36 or more)	65 or more
	When CF card extension unit is installed							
	When audio output unit is installed							
	When external input/output unit is installed							
B		80 or more (20 or more)						
C	(When CF card is not used)	50 or more (20 or more)						
	(When CF card is used)	50 or more (20 or more)						100 or more
D		50 or more (20 or more)						
E		100 or more (20 or more)						

*1 : The distance varies depending on the cable to be used. For details, consult the closest Mitsubishi Electric System & Service office.
The values in the table are given for your reference.
*2 : The distances required when the coaxial cable 3C-2V (JIS C 3501) is used.
*3 : The distance varies depending on the cable to be used. When the bending radius of the cable is larger than the indicated value, keep a space appropriate to the bending radius.

●GT11

(Unit: mm)

GOT main unit	A, D	B	C		E
			When CF card is not used	When CF card is used	
GT1155 GT1150	50 or more (20 or more)	80 or more*1 (20 or more)	50 or more*2 (20 or more)	100 or more	100 or more (20 or more)

*1 : 50 or more (20 or more) in the case of vertical installation
*2 : 80 or more (20 or more) in the case of vertical installation

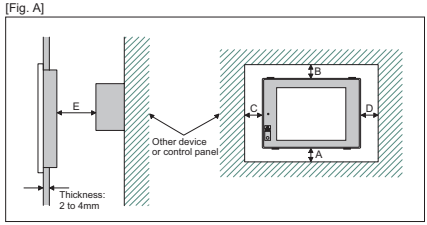
●GT10

(Unit: mm)

GOT main unit	A	B	C	D	E
GT105□	50 or more (20 or more)	80 or more (20 or more)	50 or more (20 or more)	50 or more (20 or more)	100 or more (20 or more*3)
GT1030 GT1020	50 or more (20 or more*1)	50 or more (20 or more)	50 or more (20 or more)	50 or more	80 or more (20 or more*2)

*1 : 50 or more when an RS-232/USB conversion adapter is used.
*2 : 80 or more when a personal computer connection cable is used or when a personal computer RS-232 interface is used for connecting multiple GOTs.
50 or more when an RS-232 interface is used for using an RS-232/USB conversion adapter.
*3 : 80 or more when using a USB cable or a memory board.

[Fig. A]



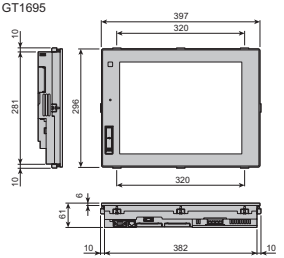
●Dimensions shown in parentheses apply when there are no devices nearby (contactor, etc.) which produce radiated noise or heat. Even with these dimensions, however, the ambient temperature must never exceed 55°C.
Depending on the unit and cable being used, a cable length longer than dimension A (or dimension D for the GT10) in above [Fig. A] may be required.

1.5 External Dimensions

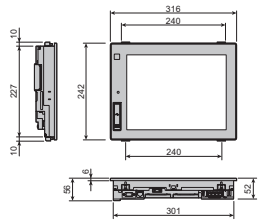
GOT main unit

(Unit: mm)

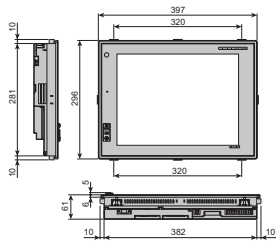
GT1695



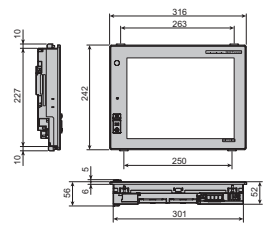
GT1685



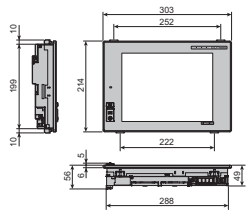
GT1595



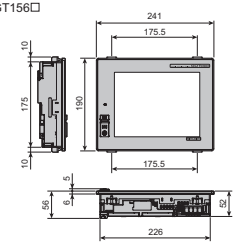
GT1585



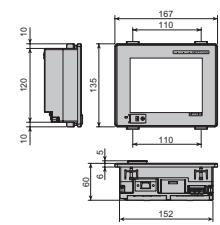
GT157□



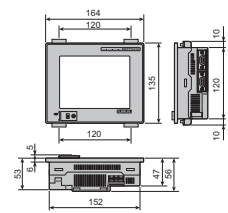
GT156□



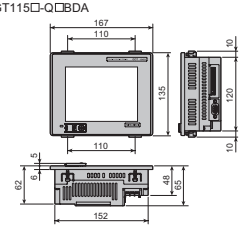
GT155□



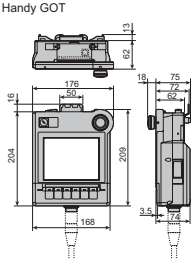
GT115□-Q□BD



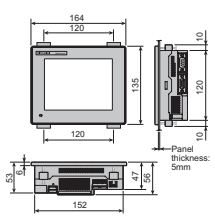
GT115□-Q□BDQ
GT115□-Q□BDA



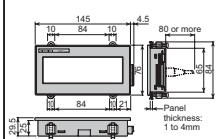
Handy GOT



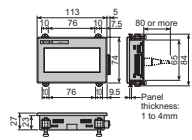
GT105□



GT1030



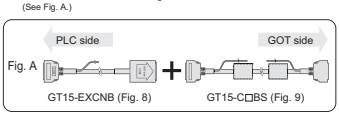
GT1020



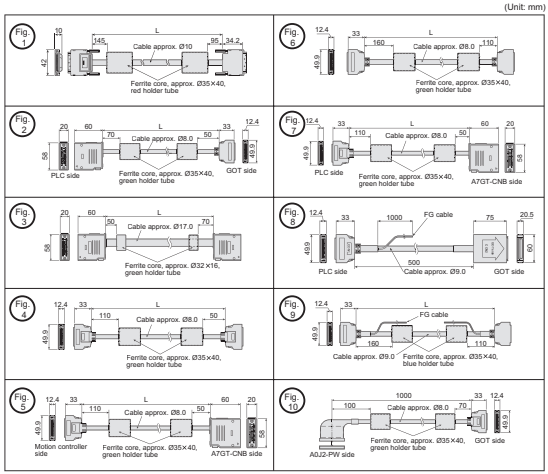
Bus connection cables

Cable model name	Cable length	External dimensions
GT15-QC□B	0.6, 1.2, 3, 5, 10m	Fig. 1
GT15-QC□BS	15, 20, 25, 30, 35m	Fig. 1
GT15-C□NB	1.2, 3, 5m	Fig. 2
GT15-AC□B	0.6, 1.2, 3, 5m	Fig. 3
GT15-A370CBL-S1	1.2, 2.5m	Fig. 4
GT15-A370CBL	1.2, 2.5m	Fig. 5
GT15-A1SC□B	0.7, 1.2, 3, 5m	Fig. 6
GT15-A1SC□NB	0.45, 0.7, 3, 5m	Fig. 7
GT15-C□EXSS-1*1	10.6, 20.6, 30.6m	Figs. 8 & 9
GT15-EXCNB	0.5m	Fig. 8
GT15-C□BS	0.7, 1.2, 3, 5, 10, 20, 30m	Fig. 9
GT15-J2C10B	1m	Fig. 10

*1 : GT15-C□EXSS-1 is a set consisting of GT15-EXCNB and GT15-C□BS.
(See Fig. A.)



(Unit: mm)



RS-422 cables

Cable model name	Cable length	External dimensions
GT16-C02R4-9S	0.2m	Fig. 11
GT01-C30R4-25P	3m	Fig. 12
GT01-C□R4-25P	10, 20, 30m	Fig. 13
GT01-C□R4-8P	1, 3, 10, 20, 30m	Fig. 14
GT10-C□R4-8P	1, 3, 10, 20, 30m	Fig. 15
GT10-C□R4-25P	3, 10, 20, 30m	Fig. 16
GT10-C10R4-8PL	1m	Fig. 17

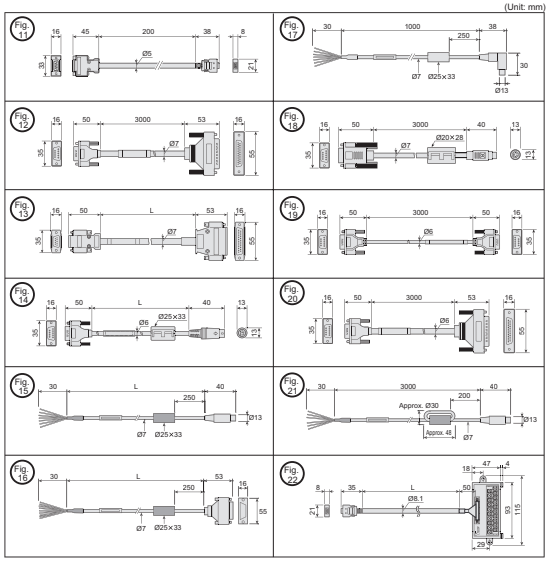
RS-232 cables

Cable model name	Cable length	External dimensions
GT01-C30R2-6P	3m	Fig. 18
GT01-C30R2-9S	3m	Fig. 19
GT01-C30R2-25P	3m	Fig. 20
GT10-C30R2-6P	3m	Fig. 21

RS-485 terminal block conversion unit

Model name	Cable length	External dimensions
FA-LTBGTR4CBL□	0.5, 1, 2m	Fig. 22

(Unit: mm)



Communication units/optional units

●Communication units/bus extension connector boxes

Product name			Model name	External dimensions
Bus connection unit	Standard model of bus connection unit for QCPU (Q mode)/motion controller CPU (Q Series)	1ch	GT15-QBUS	Fig. 1
		2ch	GT15-QBUS2	Fig. 2
	Standard model of bus connection unit for QnA/ACPU/motion controller CPU (A Series)	1ch	GT15-ABUS	Fig. 1
		2ch	GT15-ABUS2	Fig. 2
	Thin model of bus connection unit for QCPU (Q mode)/motion controller CPU (Q Series)	1ch	GT15-75QBUSL	Fig. 3
		2ch	GT15-75QBUS2L	Fig. 3
	Thin model of bus connection unit for QnA/ACPU/motion controller CPU (A Series)	1ch	GT15-75ABUSL	Fig. 3
		2ch	GT15-75ABUS2L	Fig. 3
Serial communication unit	RS-232 serial communication unit (D-sub 9-pin (male))		GT15-RS2-9P	Fig. 4
	RS-422/485 serial communication unit (D-sub 9-pin (female))		GT15-RS4-9S	Fig. 4
	RS-422/485 serial communication unit (terminal block)		GT15-RS4-TE	Fig. 5
RS-422 conversion unit	RS-232→RS-422 conversion unit (9-pin)		GT15-RS2T4-9P	Fig. 6
	RS-232→RS-422 conversion unit (25-pin)		GT15-RS2T4-25P	Fig. 6
Bus extension connector box			A9GT-QCNB	Fig. 7
Bus connector conversion box			A7GT-CNB	Fig. 8
MELSECNET/H communication unit	Optical loop unit		GT15-J71LP23-25	Fig. 9
	Coaxial bus unit		GT15-J71BR13	Fig. 10
CC-Link IE controller network communication unit			GT15-J71GP23-SX	Fig. 11
CC-Link communication unit	Intelligent device station unit		GT15-J61BT13	Fig. 12
Ethernet communication unit			GT15-J71E71-100	Fig. 13

●Optional units

Product name	Model name	External dimensions
Printer unit	GT15-PRN	Fig. 14
Multimedia unit	GT16M-MMR	Fig. 15
Video input unit	GT16M-V4	Fig. 16
	GT15V-75V4	Fig. 17
RGB input unit	GT16M-R2	Fig. 16
	GT15V-75R1	Fig. 17
Video/RGB input unit	GT16M-V4R1	Fig. 16
	GT15V-75V4R1	Fig. 17
RGB output unit	GT16M-ROUT	Fig. 18
	GT15V-75ROUT	Fig. 18
CF card unit	GT15-CFCD	Fig. 19
CF card extension unit	GT15-CFEX-C08SET	Fig. 20
Audio output unit	GT15-SOUT	Fig. 21
External input/output unit	GT15-DIOR	Fig. 22
	GT15-DIO	Fig. 22
Handy GOT connector conversion box	GT11H-CNB-37S	Fig. 23

(Unit: mm)

*1 : The connector shape varies depending on the model.

*2 : Dimensions A to D for each communication unit

Model name	A	B	C	D
GT15-QBUS	2.5	12	31.5	–
GT15-QBUS2	2.5	11	29	33.5
GT15-ABUS	4.5	15	29.5	–
GT15-ABUS2	4.5	11	31	31

*3 : Dimension X when GOT is installed
1mm smaller when a CF card unit is mounted.

●For GT16

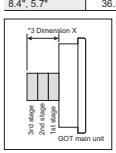
Units other than CC-Link IE controller network communication unit and multimedia unit			
1st	2nd	3rd	
15"	19.5	41	62.5
12.1"	18	39.5	61.5

CC-Link IE controller network communication unit and multimedia unit			
1st	2nd	3rd	
15"	33.5	55	76.5
12.1"	32	53	75

●For GT15

Units other than CC-Link IE controller network communication unit			
1st	2nd	3rd	
15", 10.4"	21	42.5	64.5
12.1"	18	39.5	61.5
8.4", 5.7"	23	44.5	66.5

CC-Link IE controller network communication unit			
1st	2nd	3rd	
15", 10.4"	34.5	56	78
12.1"	31.5	53	75
8.4", 5.7"	36.5	58	80



*4 : Dimension A for each communication unit

Model name	A
GT15-75QBUSL	2.5
GT15-75QBUS2L	2.5
GT15-75ABUSL	4
GT15-75ABUS2L	4

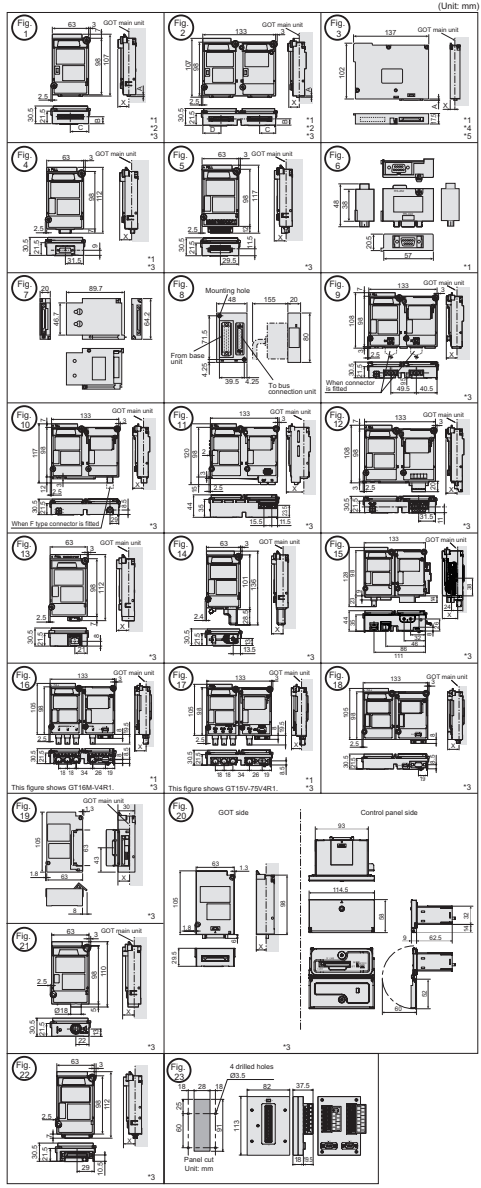
*5 : Dimension X when GOT is installed

●For GT16

15"	6.5
12.1"	5

●For GT15

15", 10.4"	8
12.1"	5
8.4", 5.7"	10



2. SOFTWARE

This chapter describes software required for using the GOT.

2. SOFTWARE

2.1 Product Lineup

MELSOFT GT Designer2 Version2

Cut screen drawing time in half *1

- Reduced screen drawing time
- Windows® standard operation and menu configuration
- Data compatibility with GT Designer

Icon display improves work efficiency

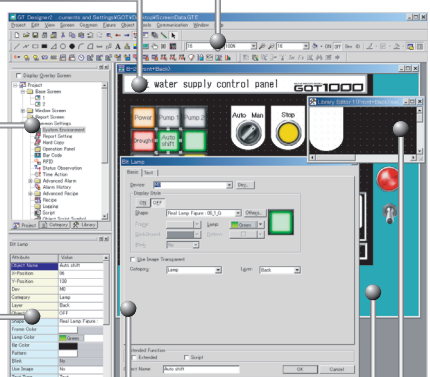
Tool bar

- Various tool bars are available such as Figure, Object, View, and My Favorites.
- Icons show object, figure type, and operation at a glance, improving work efficiency.
- Frequently used objects and figures can be registered as My Favorites.

Efficient screen creation, even when there are many screens

Drawing screen (editor)

- The area for designing GOT screens.
- A set maximum number of screens can be opened simultaneously (up to 25 screens). When additional screens are opened, screens starting from the first opened screen are closed.



An intuitive tree display makes copying, deleting, and component registration easy

Workspace

Project workspace
The entire project settings such as the created screens and common settings can be shown in a tree view. It is easy to see the entire project so the screen to be edited can be selected quickly.

Category workspace
The entire project settings can be displayed in categories in a tree view. The devices, colors, and figures of components in multiple screens can be adjusted all at once by category.
*:"Category" refers to objects or figures that have been grouped according to purpose.

Library workspace
Registered objects and figures are displayed in a tree view. Frequently used components can be registered as "favorites," permitting quick access to an object or figure.

Smoother screen design

Temporary area

- Placing objects in the temporary area facilitates smoother screen design and screen layout change operations.

List display of object & figure attributes

Property sheet

- An attributes list can be displayed for the selected object or figure.
- Object settings can be changed without opening the dialog box.
- Multiple objects and figures of the same type can be selected, and their color and character size can be adjusted at the same time.

Dedicated component editing screen

Library editor

- A component editing screen appears by double-clicking a registered component within the library workspace.
- Editing registered components is quick and easy.

Object & figure setting screen

Dialog box

- The attributes screen is displayed by double-clicking the object or figure.
- Figure changes are immediately reflected onscreen. This allows work to be performed while checking the onscreen results, thereby simplifying the process and reducing setting errors.

*:This is also possible from the Property Sheet.

*1: Compared with Mitsubishi Electric's GT Designer.

Conversion of multiple objects and figures at the same time.

Batch conversion

- Device numbers, objects, figure colors, and lamp and touch switch figures can be converted at the same time.
- This tool is useful for changing objects and figures located on multiple screens.
- Different types of objects (touch switches and numerical displays) and figures (circles and rectangles) can also be converted at simultaneously.

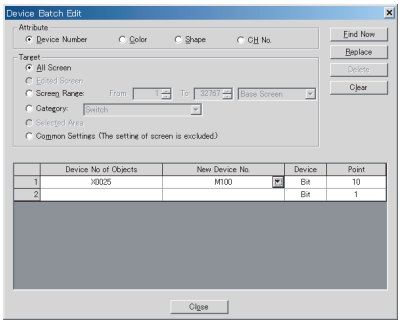
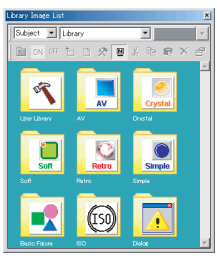


Image display of registered components

Library image list

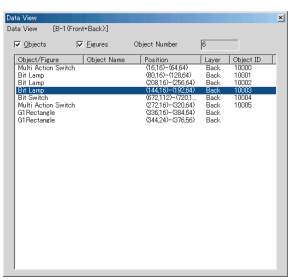
- Registered components can be shown by image color, making it easy to find the component to be used.
- Designing screens is made easy by selecting components from the image list and putting them on the drawing screen.



Easy to select overlapped figures

Data list

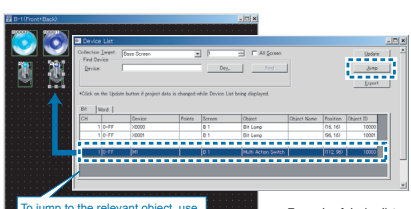
- All objects and figures located on the screen are listed.
- Data can be edited by double-clicking the object or figure from the list.



Device search jump for increasing work efficiency

Device list / Character strings list NEW

- Devices used in the screen or in the project are displayed in a list. <Device list>
- Lists the character strings of the text assigned to figures and objects. < Character strings list NEW >
- Double-clicking on a selected result jumps to the relevant object.



<Example of device list>

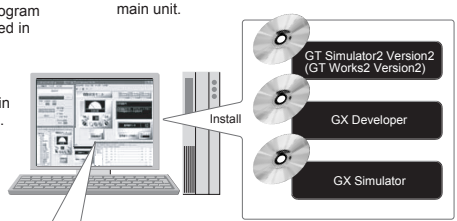
GT Simulator2 Version2

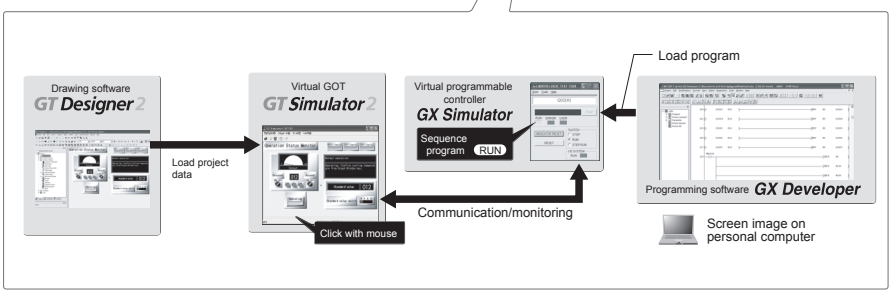
GT Simulator2 helps designers debug projects by simulating GOT operations on a personal computer. (Included with GT Works2)

Debugging from a single personal computer

Quick and easy debugging without the GOT main unit.

- GT Simulator2 can be used in combination with a sequence program simulated by GX Simulator*, allowing debugging to be performed in an intuitive manner from a single personal computer.
  *: QnUD(E)(H)CPU/FX3G is not supported.
- The GT Simulator2 screen debugging function permits screen editing in GT Designer2 with the results immediately verifiable in GT Simulator2, thereby greatly reducing debugging man-hours.
- The touch switch input is simulated by clicking the mouse. In addition to monitoring devices, GT Simulator2 can be used to check stored data such as system alarms, script error information, and alarm history.



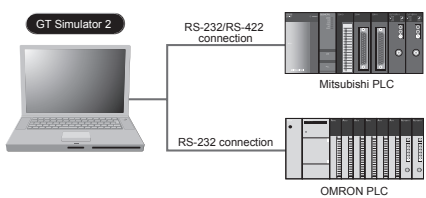


Debugging is possible by connection with a PLC, without actual GOT operation required

- Debugging can be performed using a direct CPU connection between a personal computer (GT Simulator2) and a Mitsubishi or Omron PLC, without an actual GOT unit.

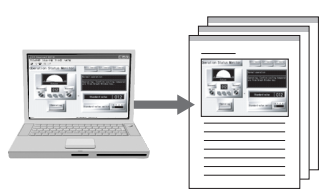
Connectable PLC	PLC⇔Personal computer connection
Mitsubishi PLC (Q*/QnA/A/FX series)	CPU direct connection RS-232, RS-422
Mitsubishi CNC (MELDAS C6/C64)	
OMRON PLC	CPU direct connection RS-232

*: QnUD(E)(H)CPU/FX3G is not supported.



Powerful support of customer specifications, compatibility checks and document creation

- While observing the operation image, the customer's screen specifications can be arranged without actual unit operation.
- Screen snapshots can be printed and saved as BMP/JPEG files which are extremely useful when creating specifications and operation manuals.



2.2 Specifications (Operating Environment)

GT Designer2 (English version) operating environment

Item	Description	
Personal computer	PC/AT compatible machine on which Windows® operates	
OS	Microsoft® Windows®98 Operating System (English version)*8 Microsoft® Windows® Millennium Edition Operating System (English version)*8 Microsoft® WindowsNT® Workstation 4.0 Operating System Service Pack 3 or later (English version)*1*8 Microsoft® Windows® 2000 Professional Operating System Service Pack 4 or later (English version)*1*8	Microsoft® Windows® XP Professional Operating System Service Pack 2 or later (English version)*2*4*5*8 Microsoft® Windows® XP Home Edition Operating System Service Pack 2 or later (English version)*2*4*5*8 Microsoft® Windows Vista® Ultimate Operating System (English version)*3*4*5*8 Microsoft® Windows Vista® Enterprise Operating System (English version)*3*4*5*8 Microsoft® Windows Vista® Business Operating System (English version)*3*4*5*8 Microsoft® Windows Vista® Home Premium Operating System (English version)*3*4*5*8 Microsoft® Windows Vista® Home Basic Operating System (English version)*3*4*5*8
CPU	Pentium® 200MHz or higher	Microsoft® Windows® XP : Pentium® Ⅱ 300MHz or higher Microsoft® Windows Vista® : 800MHz or more (recommended: 1GHz or more)
Required memory	64MB or more	Microsoft® Windows® XP : 128MB or more Microsoft® Windows Vista® : 512MB or more (recommended: 1GB or more)
Free hard disk space	For installation: 1.1GB or more *7	
	For operation: 100MB or more	
Disk drive	CD-ROM disk drive	
Display colors	High color (16 bits) or more	
Display*6	Resolution 800×600 dots or more	
Other	Internet Explorer version 5.0 or later must be installed.	
	Mouse, keyboard, printer and CD-ROM drive that can be used on the above OS	

*1 : To install GT Designer2, administrator authority is required.
*2 : To install and use GT Designer2, administrator authority is required.
*3 : To install GT Designer2, administrator authority is required.
To use GT Designer2, an account higher than the standard user is required.
To use GT Designer2 in cooperation with another application, if an administrator account is used to run the application then use an administrator account to run GT Designer2.
*4 : The following functions are not supported.
• Compatible Mode • Fast User Switching • Desktop Theme (Font) Change • Remote Desktop
*5 : Only the 32-bit OS is applicable.
*6 : To use the MES interface function, the display must have a resolution of 1024 x 768 dots or more.
*7 : 800MB or more for Windows® 98, Windows® Millennium Edition and WindowsNT®.
*8 : The following language versions are also applicable: Chinese (Simplified/Traditional), Korean, German.

GT Simulator2 (English version) operating environment

Item		Description	
Personal computer		PC/AT compatible machine on which Windows® operates	
OS		Microsoft® Windows®98 Operating System (English version) Microsoft® Windows® Millennium Edition Operating System (English version) Microsoft® WindowsNT® Workstation 4.0 Operating System Service Pack 3 or later (English version)*2 Microsoft® Windows® 2000 Professional Operating System Service Pack 4 or later (English version)*2	Microsoft® Windows® XP Professional Operating System Service Pack 2 or later (English version)*3*4*7 Microsoft® Windows® XP Home Edition Operating System Service Pack 2 or later (English version)*3*4*7 Microsoft® Windows Vista® Ultimate Operating System (English version)*3*4*7 Microsoft® Windows Vista® Enterprise Operating System (English version)*3*4*7 Microsoft® Windows Vista® Business Operating System (English version)*3*4*7 Microsoft® Windows Vista® Home Premium Operating System (English version)*3*4*7 Microsoft® Windows Vista® Home Basic Operating System (English version)*3*4*7
CPU		Pentium® 200MHz or higher	Microsoft® Windows® XP : Pentium® Ⅱ 300MHz or higher Microsoft® Windows Vista® : 800MHz or more (recommended: 1GHz or more)
Required memory		64MB or more	Microsoft® Windows® XP : 128MB or more Microsoft® Windows Vista® : 512MB or more (recommended: 1GB or more)
Free hard disk space*1		For installation (product only) : 700MB or more For operation (product + manual) : 950MB or more For operation : 200MB or more	
Disk drive		CD-ROM disk drive	
Display colors		For GT16 simulator: 65536 colors For GT15 simulator: 65536 colors For GT11 simulator: 256 colors	
Display		Resolution 800×600 dots or more (to use full-screen display function: resolution 1024×768 dots or more)	
Software	For creation/editing of project data	GT Designer2*7	
	For use of GX Simulator	GX Simulator version 5 or later*8 The GX Simulator software versions for simulating PLC CPUs are as follows.	

PLC CPU to be simulated	Software version
QCPU (A mode), ACPU, motion controller CPU (A series)	Version 5A or later
QCPU (Q mode) (excl. Q00J, Q00 and Q01CPU), QnACPU, FXCPU	Version 5E or later
Q00JCPU, Q00CPU, Q01CPU	Version 6.00A or later
Q02PHCPU, Q06PHCPU	Version 7.20W or later
Q12PHCPU, Q25PHCPU	Version 6.10L or later
Q12PRHCPU, Q25PRHCPU	Version 6.20W or later
FX3UC series FX3U series	Version 7.08J or later

*1 : To use GT Designer2, GX Developer and GX Simulator, additional free space is required.
*2 : To install GT Simulator2, administrator authority is required.
*3 : To install and use GT Simulator2, administrator authority is required.
*4 : The following functions are not supported.
• Compatible Mode • Fast User Switching • Desktop Theme (Font) Change • Remote Desktop
*5 : Use GT Designer2 in the GT Works2 containing GT Simulator2.
*6 : Use GT Simulator2, GX Developer and GX Simulator of the same language version.
*7 : Only the 32-bit OS is applicable.

MEMO

3. FUNCTION

This chapter describes available functions for the GOT.

3. FUNCTION

3.1 Functions

●Functions for each model

●: Available △: Partially available —: Not available

Category	Function *1		Optional function board *2	Extended/optional function OS installation *2	Other necessary devices *3	Details page	Model				
							GT16	GT15	GT11	GT10	GT SoftGOT 1000
Hardware specifications	Clock function				(Battery)	P.52	●	●	●	△*13	●
	Printer			Required	Printer unit	P.72, 73	●	●	—	—	●
	Video input			Required	Video/ RGB unit	P.52	●	△*4	—	—	—
	RGB input/RGB output			Required			●	△*4	—	—	—
	Multimedia function				Multimedia unit, CF card	P.53	●	—	—	—	—
	Backlight shutoff detection function					P.54	●	●	●	—	—
Main unit functions	Start from CF card		Required (GT15 only)		CF card	—	●	●	—	—	—
	FA transparent function					P.55	●	●	●*6	●	—
	Multi-channel function		Required (GT15 only)				● Max. 4ch	●*11 Max. 4ch	—	—	—
	Gateway function			Required	(CF card)	P.56	●	●	—	—	—
	MES interface function		Required	Required	(CF card)	P.57	●	●	—	—	—
Screen design	Base screen					P.58	●	●	●	●	●
	Superimpose window display						●	●	●	●	●
	Overlap window display						●	●	●	●	●
	Dialog window display						●	●	●	—	●
	Figure drawing	BMP display				P.59	●	●	●	●	●
		JPEG display					●	●	—	—	●
		DXF data					●	●	●	●	●
		IGES display					●	●	●	—	●
	Standard font (Standard)	(Japanese, Japanese (supporting Europe), Simplified Chinese, Simplified Chinese (supporting Europe))					●	●	●	△*12	●
	Standard font (Option)	Simplified Chinese		Required			●	●	—	—	●
		Traditional Chinese		Required			●	●	—	—	●
		Japanese		Required			●	●	—	—	●
	HQ font						●	●	●	●	●
	TrueType font						●	●	●	●	●
	TrueType font (7 segments)						●	●	●	—	●
	Windows® font						●	●	●	●	●
	Stroke standard font (Extended)			Required			●	●	—	—	●
	Stroke font (Option)			Required			●	●	—	—	●
	Object superimposition (layers)						●	●	●	—	●
	Screen switching					P.60	●	●	●	●	●
	Station No. switching						●	●	—	—	●
	Language switching function					P.61	●	●	●	●	●
	Password						●	●	●	●	●
	System information						●	●	●	●	●
	Communication settings					P.62	●	●	●	●	—
	Startup logo						●	●	●	●	●
	Comment registration					P.63	●	●	●	●	●
	Parts registration						●	●	●	●	●
	Data operation function						●	●	●	●	●
	Offset function					P.64	●	●	●	●	●
	Security function	Security level authentication					●	●	●	●	●
		Operator authentication		Required			●	●	—	—	●
	Lamp display					P.65	●	●	●	●	●
	Touch switch						●	●	●	●	●
	Numerical display/input						●	●	●	●	●
	Data list display						●	●	●	—	●
	ASCII display/input					P.66	●	●	●	●	●
	Clock display						●	●	●	●	●
	Comment display					P.67	●	●	●	●	●
	Advanced alarm observation/display				(CF card)		●	●	—	—	●
	Alarm list display					P.68	●	●	●	△*7	●
	Alarm history display				(CF card)		●	●	●	●	●
	Floating alarm display					P.69	—	—	●	●	—
	Parts display				(CF card)		●	●	●	●	●
	Parts movement				(CF card)		●	●	●	—	●
	Panel meter display						●	●	●	●	●
	Level display					P.70	●	●	●	—	●
	Trend graph						●	●	●	●	●
	Historical trend graph *5			*5 Required	(CF card)		●	●	—	—	●

● : Available △: Partially available —: Not available

Category	Function *1		Optional function board *2	Extended/optional function OS installation *2	Other necessary devices *3	Details page	Model				
							GT16	GT15	GT11	GT10	GT SoftGOT 1000
Screen design	Line graph					P.70	●	●	●	●	●
	Bar graph						●	●	●	●	●
	Statistics graph					P.71	●	●	●	●	●
	Scatter graph						●	●	●	—	●
	Status observation function						●	●	●	●	●
	Advanced recipe function			Required	(CF card)	P.72	●	●	—	—	●
	Recipe function			Required	(CF card)		●	●	●	●	●
	Time action function						●	●	●	●	●
	Report function			Required	Printer unit CF card		●	●	—	—	●
	Hard copy function	Saving files in CF card			CF card	P.73	●	●	—	—	●
		Printing with printer		Required	Printer unit						
	Bar code function			Required		P.74	●	●	△*10	—	—
	Remote Personal computer function			Required	Video/RGB input unit	P.75	●	●	—	—	—
	RFID function			Required		P.74	●	●	●	—	—
	Sound output function			Required	Sound output unit	P.75	●	●	—	—	●
	External I/O function			Required	External I/O unit	P.73	●	●	—	—	—
	Operation panel function			Required	External I/O unit		●	●	—	—	●
	Set overlay screen function					P.75	●	●	●	●	●
	Operation log function			Required	CF card	P.76	●	●	—	—	●
	Document display function		Required (GT15 only)	Required	CF card		●	●	—	—	●
	Logging function			Required	(CF card)	P.77	●	●	—	—	●
	Script function	Project script					●	●	●	—	●
		Screen script					●	●	●	—	●
		Object script		Required			●	●	—	—	●
	Device data transfer function			Required			●	●	—	—	—
Maintenance functions	System monitor function			Required		P.78	●	●	●	—	—
	Device monitor function			Required			—	—	—	●	—
	MELSEC-A list editor function			Required			●	●	△*14	—	—
	MELSEC-FX list editor function			Required			●	●	△*15	△*16	—
	Ladder monitor function		Required (GT15 only)	Required	(CF card)	P.79	●	△*9	—	—	—
	Intelligent module monitor function			Required			●	△*9	—	—	—
	Q motion monitor function			Required		P.80	●	●	—	—	—
	Servo amplifier monitor function			Required			●	●	—	—	—
	Network monitor function			Required			●	●	—	—	—
	CNC monitor function					P.81	●	△ *8	—	—	—
	SFC monitor function		Required (GT15 only)	Required		P.82	●	●	—	—	—
	CNC data I/O function			Required	CF card/ USB memory *17	P.81	●	△ *8	—	—	—
	Backup/restore function			Required	CF card/ USB memory *17		●	●	—	—	—
	Maintenance report function				Battery	P.82	●	●	—	—	—

*1: Function contents, such as the number of setting points and data storage location, vary depending on the model.
*2: The option function board is required depending on the function version or hardware version of GOT main unit.
In addition, the option function board to be used differs depending on the function.
For the details, refer to "3.2 Precautions for Use". For GT10 and GT SoftGOT1000, an option function board and the installation of the extended function OS and option OS are not required.
*3: "Other devices" refers to necessary options or option units other than the option function board.
The devices in parentheses are necessary depending on the purpose of operation.
For details, refer to "3.2 Precautions for Use".
*4: Available only for GT1585V and GT1575V.
*5: The logging function must be set before the historical trend graph is used.The option OS (logging) must be installed.
*6: There are structural restrictions for GT1155HS-QSBD and GT1150HS-QLBD.
*7: Only the user alarm is available.
*8: Only GT1595-XTB□, GT1585(V)-STB□ and GT1575(V)-STB□ are available.
*9: Only GT1595-XTB□, GT1585(V)-STB□, GT1575(V)-STB□, GT1575-VTB□, GT157□-VNB□, GT1565-VTB□, GT1562-VNB□ and GT1555-VTBD are available.
*10: Only GT115□-Q□BD, GT115□-Q□BD□ are available.
*11: Up to two channels for GT155□.
*12: Only Japanese (supporting Europe) is available for GT10.
*13: Only GT1030 is available.
*14: Only GT115□-Q□BDA is available.
*15: Only GT115□-Q□BD and GT115□HS-Q□BD are available.
*16: Only GT105□ is available.
*17: The USB memory is only available for GT16.

3.2 Precautions for Use

●Selecting option function board and CF card

(1) When using option functions or extended functions

The extended function OS or option OS and the option function board are required for using each function.

For installing the extended function OS or option OS on the GOT, make sure that the user area of the specified drive has enough free space for the OS memory space shown on the next page.

For details of data transfer, refer to the following table.

☞ GT Designer2 Basic Operation/Data Transfer Manual
(Section 8.1.2 Drive capacity required for data transfer)

The following shows the option function boards applicable to each GOT.

GOT	Option function board
GT16	GT16-MESB
GT15	GT15-FNB, GT15-QFNB, GT15-QFNB16M, GT15-QFNB32M, GT15-QFNB48M, GT15-MESB48M
GT11	GT11-50FNB
GT10	Not required

An option function board (GT15-FNB or GT11-50FNB) is built in the following GOT.

GOT	Model	Description
GT16	All models	For using the MES Interface function, the option function board is required.
GT15*1	All models	Function version D or later
GT11	GT1155-QTBDQ, GT1155-QTBDA, GT1155-QSBDQ, GT1155-QSBDA, GT1150-QLBDQ, GT1150-QLBDA	
	GT1155-QTBD	Hardware Version A or later
	GT1155HS-QSBD, GT1150HS-QLBD	Hardware Version B or later
	GT1155-QSBD, GT1150-QLBD	Hardware Version C or later

*1: For enabling the option function board built in the GOT, the latest standard monitor OS must be installed on the GOT.
For the OS version, refer to the following table.

☞ App5. List of Functions Added by GT Designer2 Version Upgrade (For GOT1000 Series)

Option functions operated with the GT15-FNB or GT11-50FNB can be used without installing an additional option function board.

For using functions operated with the GT16-MESB, GT15-QFNB(□M), or GT15-MESB48M, and for adding more memory to the GT15, install an applicable option function board.
For the necessary option function board for each option function, refer to the following manual.

☞ GOT1000 Series Extended/Option Functions Manual

An additional option function board can be installed on the GOT with a built-in option function board. (An option function board, which is not applicable to GOT, cannot be installed. (An option function board for the GT11 cannot be installed on the GT15.))

For how to check the function version or hardware version, refer to the following manuals.

☞ GT15 User's Manual
GT11 User's Manual
HANDY GOT USER'S MANUAL

For GT16

(a) Extended function OS

○: Required (Either one) ×: Unusable

Function name	Extended function OS name	OS memory space (user area)*1		Option function board
		a Built-in flash memory (ROM)	A User memory (RAM)	GT16-MESB
Bar code	Bar code	84KB	84KB	Not required
RFID	RFID	166KB	166KB	Not required
System monitor	System monitor	746KB	746KB	Not required
Report	Report	150KB	235KB	Not required
Printer	Printer	522KB	1104KB	Not required
Stroke font*2	Stroke Font Support Data	400 KB	400 KB	Not required
	Stroke Standard Font(JPN)	2160KB	2160KB	Not required
	Stroke Standard Font(JPN)(supporting Hangul)	3175KB	3175KB	Not required
	Stroke Standard Font(China GB)	1474KB	1474KB	Not required
	Stroke Standard Font (China GB)(supporting Hangul)	2016KB	2016KB	Not required
Video display	Video/RGB	292KB	474KB	Not required
RGB display				
Multimedia	Multimedia	292KB	1074KB	Not required
Remote personal computer operation	Video/RGB	292KB	474KB	Not required
	PC Remote Operation	50KB	84KB	Not required
Backup/restore	Backup/Restore	420KB	766KB	Not required
Operator Authentication	Operator authentication	460KB	730KB	Not required
Sound Output	Sound Output	100KB	200KB	Not required
External I/O / Operation Panel	External I/O / Operation Panel	70KB	100KB	Not required
CNC data I/O	CNC Data I/O	210KB	383KB	Not required
	GOT Platform Library	77KB	200KB	Not required
Device data transfer	Device Data Transfer	50KB	100KB	Not required

*1 The OS memory space differs between the built-in flash memory (ROM) and the user memory (RAM). When writing data, including the OS, communication drivers, and project data, from the built-in flash memory (ROM) to the user memory (RAM), the OS memory space increases. Make sure that the total data size does not exceed the user memory (RAM) capacity.

*2 For using fonts, install option fonts if necessary.
For how to use fonts and the setting method, refer to the following manual.

GT Designer2 Version□ Screen Design Manual (2.3 Specifications of Applicable Characters)

(b) Option OS

○: Required (Either one) ×: Unusable

Function name	Option OS name	OS memory space (user area)*1		Option function board
		b Built-in flash memory (ROM)	B User memory (RAM)	GT16-MESB
Maintenance timing setting	Not required	-	-	Not required
Multi-channel	Not required	-	-	Not required
KANJI regions	Standard Font (China GB)	1280KB	1280KB	Not required
	Standard Font (China Big5)	1920KB	1920KB	Not required
	Standard Font (Japanese)	1280KB	1280KB	Not required
	Stroke Font (JPN)	1037KB	1037KB	Not required
	Stroke Font (China GB5)	1248KB	1248KB	Not required
	Stroke Font (China Big5)	1680KB	1680KB	Not required
Operation log	Operation Log	384KB	1221KB	Not required
	Device name converter	400KB	800KB	Not required
Document display	Document Display	150KB	3072KB	Not required
Kana-kanji conversion (enhanced version)	KANA KANJI(JPN) (Enhanced Version)	1242KB	2774KB	Not required
Historical Trend Graph	Not required	-	-	Not required
Logging	Logging	380KB	710KB	Not required
Recipe	Recipe	70KB	100KB	Not required
Advanced Recipe	Advanced Recipe	310KB	1187KB	Not required
Object Script	Object Script	180KB	360KB	Not required
Ladder monitor	Ladder monitor for MELSEC-A	342KB	674KB	Not required
	Ladder monitor for MELSEC-FX	342KB	674KB	Not required
	Ladder monitor for MELSEC-Q/QnA	590KB	4170KB	Not required
A list editor	List editor for MELSEC-A	542KB	1024KB	Not required
FX list editor	List editor for MELSEC-FX	542KB	1024KB	Not required
Intelligent module monitor	Intelligent module monitor	390KB	770KB	Not required
Network monitor	Network monitor	210KB	370KB	Not required
Q motion monitor	Q motion monitor	390KB	770KB	Not required
Servo amplifier monitor	Servo amplifier monitor	390KB	770KB	Not required
CNC monitor	CNC monitor	390KB	770KB	Not required
SFC monitor	GOT Platform Library	77KB	200KB	Not required
	SFC monitor	608KB	1940KB	Not required
	GOT Function Expansion Library	4728KB	19381KB	Not required
Gateway	Gateway (Server, Client)	50KB	100KB	Not required
	Gateway (Mail)	50KB	100KB	Not required
	Gateway (FTP)	50KB	84KB	Not required
MES interface	MES Interface	1598KB	13461KB	○

*1 The OS memory space differs between the built-in flash memory (ROM) and the user memory (RAM). When writing data, including the OS, communication drivers, and project data, from the built-in flash memory (ROM) to the user memory (RAM), the OS memory space increases. Make sure that the total data size does not exceed the user memory (RAM) capacity.

For GT15

(a) Extended function OS

○: Required (Either one) ×: Unusable

Function name	Extended function OS	Ⓐ OS memory space (user area)	Option function board		
			GT15-FNB	GT15-QFNB GT15-QFNB□M	GT15-MESB48M
Bar code	Bar code	84KB	Not required		
RFID	RFID	166KB	Not required		
System monitor	System monitor	746KB	Not required		
Report	Report	235KB	Not required		
Printer	Printer	1104KB	Not required		
Stroke font*3	Stroke Font Support Data	400 KB	Not required		
	Stroke Standard Font(JPN)	2160KB	Not required		
	Stroke Standard Font(JPN)(supporting Hangul)	3175KB	Not required		
	Stroke Standard Font(China GB)	1474KB	Not required		
	Stroke Standard Font(China GB)(supporting Hangul)	2016KB	Not required		
Video display*2	Video/RGB	512KB	Not required		
RGB display*2					
Remote personal computer operation*2	Video/RGB	512KB	Not required		
	PC Remote Operation	84KB	Not required		
Backup/restore	Backup/Restore	820KB	Not required		
Operator Authentication	Operator authentication	784KB	Not required		
Sound Output	Sound Output	200KB	Not required		
External I/O / Operation Panel	External I/O / Operation Panel	100KB	Not required		
CNC data I/O*1	CNC Data I/O	437KB	Not required		
	GOT Platform Library	100KB	Not required		
Device data transfer	Device Data Transfer	100KB	Not required		

*1 Applicable to the GT1595-X, GT1585V-S, GT1585-S, GT1575V-S, and GT1575-S only.

*2 Applicable to the GT1585V-S and GT1575V-S only.

*3 For using fonts, install option fonts if necessary.
For how to use fonts and the setting method, refer to the following manual.

GT Designer2 Version□ Screen Design Manual (2.3 Specifications of Applicable Characters)

(b) Option OS

○: Required (Either one) ×: Unusable

Function name	Option OS name	B OS memory space (user area)	Option function board		
			GT15-FNB	GT15-QFNB GT15-QFNB□M	GT15-MESB48M
Maintenance timing setting	Not required	-	○	○	○
Multi-channel	Not required	-	×	○	○
KANJI regions	Standard Font (China GB)	1280KB	○	○	○
	Standard Font (China Big5)	1920KB	○	○	○
	Standard Font (Japanese)	1280KB	○	○	○
	Stroke Font (JPN)	1037KB	○	○	○
	Stroke Font (China GB5)	1248KB	○	○	○
	Stroke Font (China Big5)	1680KB	○	○	○
Operation log	Operation Log	1218KB	○	○	○
	Device name converter	800KB	○	○	○
Document display	Document Display	2048KB	×	○	○
Kana-kanji conversion	KANA KANJI(JPN)	1223KB	○	○	○
Kana-kanji conversion (enhanced version)	KANA KANJI(JPN) (Enhanced Version)	2774KB	○	○	○
Historical Trend Graph	Not required	-	○	○	○
Logging	Logging	740KB	○	○	○
Recipe	Recipe	100KB	○	○	○
Advanced Recipe	Advanced Recipe	1241KB	○	○	○
Object Script	Object Script	360KB	○	○	○
Ladder monitor*2	Ladder monitor for MELSEC-A	523KB	○	○	○
	Ladder monitor for MELSEC-FX	592KB	○	○	○
	Ladder monitor for MELSEC-Q/QnA	1082KB	×	○	○
A list editor	List editor for MELSEC-A	1058KB	○	○	○
FX list editor	List editor for MELSEC-FX	1058KB	○	○	○
Intelligent module monitor*2	Intelligent module monitor	384KB	○	○	○
Network monitor	Network monitor	324KB	○	○	○
Q motion monitor	Q motion monitor	607KB	○	○	○
Servo amplifier monitor	Servo amplifier monitor	524KB	○	○	○
CNC monitor*1	CNC monitor	588KB	○	○	○
SFC monitor*2*4	GOT Platform Library	100KB	Not required		
	SFC monitor	1373KB	×	○	○
	GOT Function Expansion Library	4728KB	×	○	○
Gateway	Gateway (Server, Client)	100KB	○	○	○
	Gateway (Mail)	100KB	○	○	○
	Gateway (FTP)	64KB	○	○	○
MES interface*3	MES Interface	3196KB	×	×	○

*1 Applicable to the GT1595-X, GT1585V-S, GT1585-S, GT1575V-S, and GT1575-S only.

*2 Inapplicable to the GT1555-Q and GT1550-Q.

*3 A capacity of 8218KB in the add-on memory (48MB) of the GT15-MESB48M is used for the MES interface function operation.

*4 For using the SFC monitor function, a capacity of 6201KB or more is required in the user area of the specified drive for installing the extended function OS and option OS. (For using the GOT with the built-in flash memory of 5MB, set the OS boot drive to [A: Standard CF Card].)
For operating GOT Function Expansion Library (option OS), a capacity of 8192KB is required in the user area of the GOT memory. (A total memory capacity of 14393KB is required for using the SFC monitor function.)
Therefore, the following settings are required depending on the GOT to be used.

GOT	Required setting
GT1575-VN, GT1572-VN, GT1562-VN	• Setting the OS boot drive to [A: Standard CF Card] • Memory expansion (Installing an option function board with add-on memory)
Other than the above	• Memory expansion (Installing an option function board with add-on memory)

For setting the OS boot drive, refer to the following.

☞ GT Designer2 Version□ Basic Operation/Data Transfer Manual (Chapter 8 TRANSFERRING DATA)

For GT11

○: Required ×: Disabled

Function name		Extended function OS/Option OS	OS capacity (User area)	Option function board
				GT11-50FNB
Extended function	Bar code	Bar code	0KB	Not required
	RFID	RFID		Not required
	System monitor	System monitor		Not required
Optional function	Recipe	Recipe		○
	A list editor*1	MELSEC-A list editor		○
	FX list editor*2	MELSEC-FX list editor		○

*1 Not available for GT1155-QTBDQ, GT1155-QSBDQ and GT1150-QLBDQ.
*2 Not available for GT1155-QTBDQ, GT1155-QTBDA, GT1155-QSBDQ, GT1155-QSBDA, GT1150-QLBDQ and GT1150-QLBDA.

For GT10

Function name		Extended function OS/Option OS	OS capacity (User area)	Option function board
Optional function	Bar code	Not required	-	Not required
	Recipe	Not required	-	Not required
	FX list editor *1	Not required	-	Not required

*1 Inapplicable to the GT1030 and GT1020.

For GT SoftGOT1000

○: Required ×: Disabled

Function name		Extended function OS/Option OS	OS capacity (User area)	Option function board
Extended function	Report	Not required	-	Not required
	Printer	Not required	-	Not required
	Stroke font	Not required	-	Not required
	Operator authentication	Not required	-	Not required
	Sound output	Not required	-	Not required
	External I/O/operation panel*1	Not required	-	Not required
	Device data transfer	Not required	-	Not required
Optional function	Kanji region	Not required	-	Not required
	Operation log	Not required	-	Not required
	Document display	Not required	-	Not required
	Historical trend graph	Not required	-	Not required
	Logging	Not required	-	Not required
	Recipe	Not required	-	Not required
	Advanced recipe	Not required	-	Not required
	Object script	Not required	-	Not required

*1 With the keyboard input function, operations equivalent to the ones with the operation panel function are available.

(2) Selecting by user area size (drive space required for data transfer)

The GOT operates by expanding the OS or Project data stored in the built-in flash memory (ROM) to the user memory (RAM).

For the GT16, since a part of the data is compressed to be stored in the built-in flash memory (ROM), the data size becomes larger when it is expanded to the user memory (RAM).

Boot OS, Standard monitor OS, Communication driver, Extended function OS, Option OS, Special data, Project data and other data resides on the system area and user area of the drive specified by the GOT.

Regarding Boot OS, Standard monitor OS and first communication driver on the GT15 that reside on the system area of the C drive, it is not necessary to check the data capacity before installation.

However, when the GT16 or GT15 is used, for extended function OS, option function, communication driver (the second or later communication driver for the GT15) and project data that reside on the user area, data will not be transferred if there is insufficient space on the target drive.

When performing data transfer (OS installation, project data download), confirm the amount of space available on the specified drive's user area and the amount of data to be transferred.

User area size

Transfer destination		User area size		Remarks
GT16	Drive C (C: Built-in Flash memory)	15MB		The total memory size of Extended function OS, Option OS, Special data, and Communication driver must be smaller than the user area capacity. Download (store) the Project data to Drive A (A: Standard CF Card) or Drive B (B: Extended Memory Card) if user area does not have enough space for Project data, Extended function OS, Option OS, Special data, Communication driver, and buffering. (Refer to 3.2. Point)
	Drive A (A: Standard CF Card)	Check the CF Card capacity.		
	Drive B (B: Extended Memory	Check the CF Card capacity.		
	Drive E (E: USB memory)	Check the USB memory capacity.		
GT15	Drive C (C: Built-in Flash memory)	GT1595-X, GT1585V-S, GT1585-S, GT1575V-S, GT1575-V, GT1565-V, GT1555-V GT1555-Q, GT1550-Q	9MB	The total size of the extended function OS, option OS, special data, and second communication driver or later must be within the user area size. An option function board with add-on memory is necessary if user area does not have enough space for Project data, Extended function OS, Option OS, Special data, Communication driver, and buffering. (Refer to 3.2. Point)
		GT1575-VN, GT1572-VN GT1562-VN	5MB	
	Drive A (A: Standard CF Card)	Check the memory size of CF card.		
	Drive B (B: Extended Memory Card)	Check the memory size of CF card.		
GT11	Drive C (C: Built-in Flash memory)	3MB		The project data size is up to 3MB.
GT10	Drive C (C: Built-in Flash memory)	GT105□	3MB	The project data size is a maximum of 3MB.
	Drive C (C: Built-in Flash memory)	GT1030	1.5MB	The project data size is up to 1.5MB.
	Drive C (C: Built-in Flash memory)	GT1020	512KB	The project data size is up to 512KB.

Each type of data is grouped and shown as a, b, A, ...
Apply the corresponding size when calculating the data size with the following expressions or flow charts.

Data type (GT16)
a Extended function OS stored in the ROM
b Option OS stored in the ROM
A Extended function OS expanded to the RAM
B Option OS expanded to the RAM
C Communication driver
D Special data
E Project data
F Buffering area

Data type (GT15)
A Extended function OS
B Option OS
C Second or later communication driver
D Special data
E Project data
F Buffering area

a, A Data size of extended functions

For the data size of the extended function OS, refer to section 3.2 (1).

b, B Data size of optional functions

For the data size of the option OS, refer to section 3.2 (1).

C Communication driver data size

For GT16

		User area capacity
GT16	Bus (Q)	180KB
	A/QnA/Q CPU, QJ71C24	180KB
	MELSEC-FX	180KB
	MELSECNET/H	200KB
	CC-Link IE Controller Network	200KB
	JTEKT TOYOPUC-PC	160KB
	Ethernet (YASKAWA)	160KB
	Computer	230KB
	Communication driver other than the above	150KB

For GT15

Communication drivers use 150 KB each.

F Buffering area size (data size)

For the buffering area size, refer to the settings for the advanced alarm.

Refer to the following manual for the data size of the buffering area size.

☞GT Designer2 Version□ Screen Design Manual

(a) Newly transferring data to the GOT

Check whether the following expression is satisfied or not.

Refer to the following section for the project data size.

☞GT Designer2 Version Basic Operation/Data Transfer Manual

8.1.2 3 Checking the project data size to be downloaded in this section

- For GT16□□
  The GT16□ can store the project data into Drive C or Drive A (A: Standard CF Card).

  User area space > Project data size (E) + Extended function OS data size (a)*1 + Option OS data size (b)*1*2
  + Communication driver data size (C) + Special Data (D)

  *1 Calculate the sizes of Extended function OS and Option OS with the values (a) and (b) which are the sizes when they are stored in the built-in flash memory (ROM).

- For GT15□□
  The GT15□□ can store the project data into Drive C or Drive A (A: Standard CF Card).

  User area space > Project data size (E) + Extended function OS data size (A) + Option OS data size (B)*2
  + Second or later Communication driver data size (C) + Special Data (D)

- For GT11□□ and GT10□□
  The GT11□□, GT10□□ can store the project data into Drive C.

  User area space > Project data size

  *2 When the GOT project data created on PX Developer (Ver.1.15 or later) is used, logging function and object script function are required.
  Refer to the PX Developer User's Manual for details.

Point

(1) When the destination drive has enough free space, but a message, which indicates that the space is not enough, is displayed

After checking [Delete all old data in Project folder], download all the project data.
When the backup is required for the project data, upload the project data to a personal computer or memory card before downloading the data.

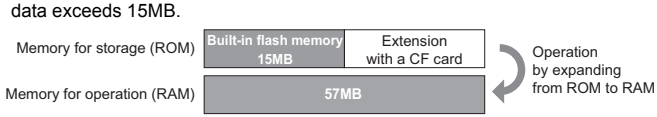
GT16

(2) Memory for storage (ROM) and memory for operation (RAM)

For GT16□□

- The GT16□□ operates by expanding the OS or project data stored in the memory for storage (ROM) to the memory for operation (RAM).
  Memory for storage (ROM) :Built-in flash memory 15MB Included as standard
  Memory for operation (RAM) :User memory 57MB Included as standard

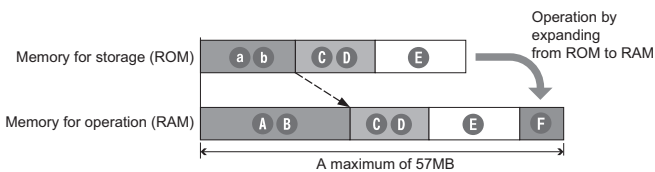
The memory for storage can be extended by the CF card if the OS or project data exceeds 15MB.



The built-in flash memory corresponds to "Drive C", and the CF card corresponds to "Drive A (standard)" or "Drive B (extended)".

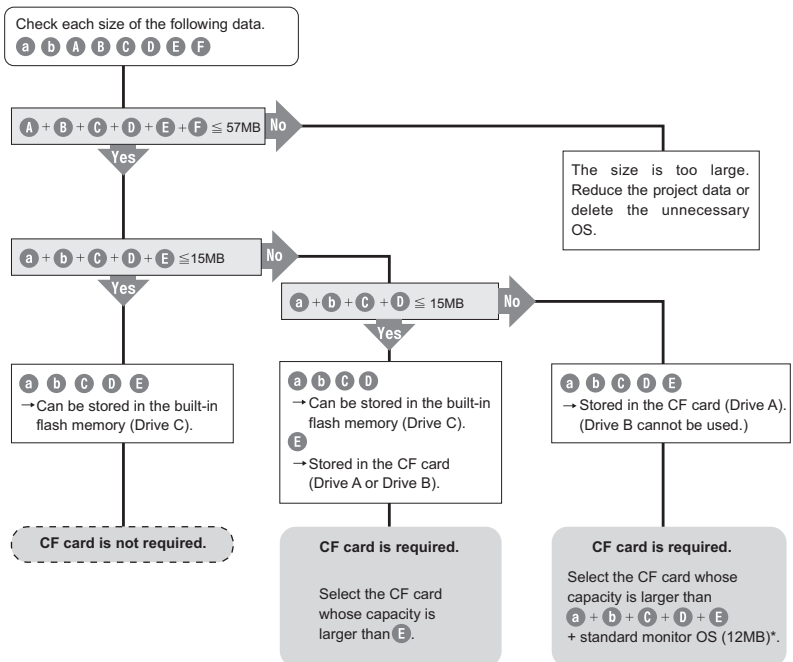
• The memory for operation (RAM) cannot be extended.
If the amount of data expanded to the memory for operation (RAM) exceeds 57MB, data must be resized by reducing the project data or deleting the unnecessary OS.

For the extended function OS and option OS, the compressed data a and b are stored in the memory for storage (ROM) and the data size becomes larger as shown by A and B when they are expanded to the memory for operation (RAM).
The buffering area F is an area for storing the resource data such as logging or advanced alarm and uses the memory for operation (RAM). The data size varies depending of the setting.
The stored resource data is stored to the specified storage destination (Drive A or Drive B) when saving to a file is specified by GT Designer2. (The memory for storage (ROM) is not used.)
If the amount of data expanded to the memory for operation (RAM) exceeds 57MB, data must be resized by deleting the project data or unnecessary OS.



Data type	
a	Extended function OS stored in the ROM
b	Option OS stored in the ROM
A	Extended function OS expanded to the RAM
B	Option OS expanded to the RAM
C	Communication driver
D	Special data
E	Project data
F	Buffering area

• Whether the CF card is required or not and the required capacity of CF card vary depending on the data size.
Select whether to use the CF card and its capacity using the following flow chart.



* : When the extended function OS and option OS are stored in the CF card (Drive A), the standard monitor OS (standard monitor OS, basic font, etc.) must be stored also in the CF card (Drive A).

For GT15□□

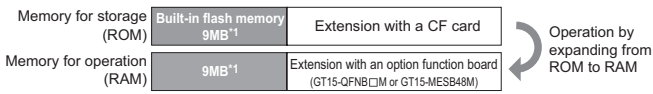
- The GT15□□ operates by expanding the OS or project data stored in the memory for storage (ROM) to the memory for operation (RAM).

  Memory for storage (ROM): Built-in flash memory 9MB or 5MB*1 Included as standard

  Memory for operation (RAM): 9MB or 5MB*1 Included as standard

  *1: Varies depending on the GOT main unit model. GT15□□-□TB□: 9MB
  GT15□□-VNB□: 5MB

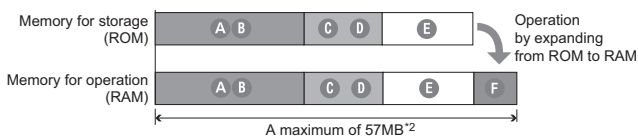
  The memories can be extended by the CF card and expansion memory-attached option function board (GT15-QFNB□M or GT15-MESB48M) if the OS or project data exceeds 9MB or 5MB.



  The built-in flash memory corresponds to "Drive C", and the CF card corresponds to "Drive A (standard)" or "Drive B (extended)".

- The memory for operation (RAM) can be extended up to 57MB*2 with the option function board.
  If the amount of data expanded to the memory for operation (RAM) exceeds 57MB*2, data must be resized by deleting the project data or unnecessary OS.

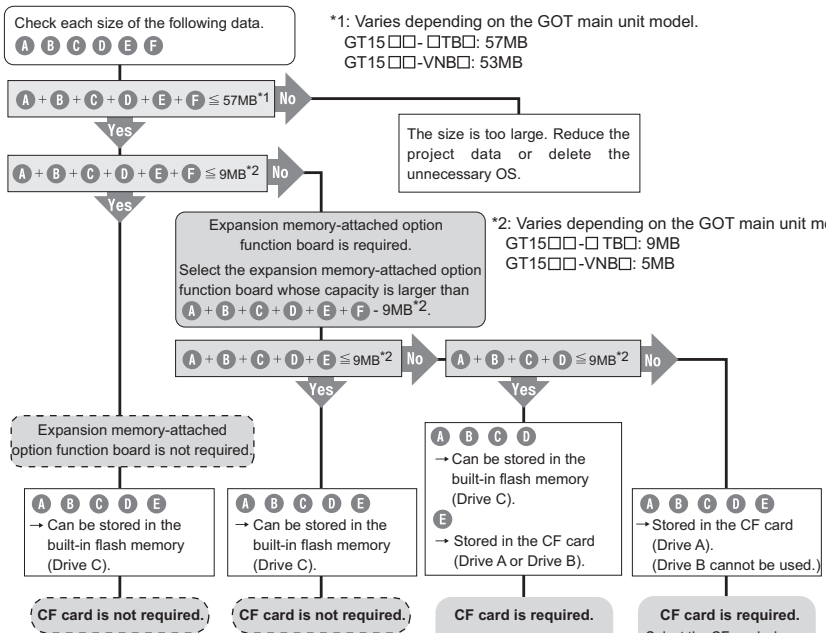
  The buffering area F is an area for storing the resource data such as logging or advanced alarm and uses the memory for operation (RAM). The data size varies depending of the setting. The stored resource data is stored to the specified storage destination (Drive A or Drive B) when saving to a file is specified by GT Designer2. (The memory for storage (ROM) is not used.)



  *2: Varies depending on the GOT main unit model. GT15□□-□TB□: 57MB
  GT15□□-VNB□: 53MB

Data type
A Extended function OS
B Option OS
C Second or later communication driver
D Special data
E Project data
F Buffering area

• Whether the expansion memory-attached option function board or CF card is required or not and the required capacity of expansion memory-attached option function board or CF card vary depending on the data size.
Select whether to use the expansion memory-attached option function board or CF card and their capacity using the following flow chart.



*3: When the extended function OS and option OS are stored in the CF card (Drive A), the standard monitor OS (standard monitor OS, basic font, first communication driver, etc.) must be stored also in the CF card (Drive A).

Point

Limit to write OS

(1) When the drive of the Standard OS in the Boot Drive is C drive

Even when the option function board with add-on memory is mounted to the GOT, the total volume of the Communication driver (the second or later one for the GT15□□), Extended function OS, and Option OS cannot exceed the user area capacity in the C drive.

(2) When the drive of the Standard OS in the Boot Drive is C drive

For GT16□□: Since the memory for operation (RAM) is included as standard, the total volume of the Communication driver, Extended function OS, Option OS, project data, special data, and etc. can be up to the max. total memory capacity.

Max. RAM capacity

Transfer destination	Target models	Max. capacity
GT16	GT1695M-X, GT1685M-S	57MB

Refer to the following manual for details about the capacities of the memory for operation (RAM).

GT16 User's Manual

For GT15□□: When the option function board with add-on memory is mounted to the GOT, the total volume of the second or later Communication driver, Extended function OS, Option OS, project data, special data, and etc. can be up to the max. total memory capacity of the option function board with add-on memory.

Max. total capacity when using the expansion memory-attached option function board

Transfer destination	Target model	Max. total capacity
GT15	GT1595-X, GT1585V-S, GT1585-S, GT1575V-S GT1575-V, GT1565-V, GT1555-V, GT1555-Q, GT1550-Q	57MB
	GT1575-VN, GT1572-VN, GT1562-VN	53MB

Refer to the following manual for details about the types and capacities of the option function boards with add-on memory.

GT15 User's Manual

●Compatibility with existing product

Project data

(1) Compatibility when changing from GT Designer to GT Designer2 *

The project data created with GT Designer is available for GT Designer2.

(2) Compatibility when changing GOT900 series to GOT1000 series *

- Using data of GOT-A900 series in GOT1000 series
  The project data for GOT900 series is available for GOT1000 series.
- Using data of GOT-F900 series in GOT1000 series
  The project data for GOT-F900 series is available for GOT1000 series.
  For details, refer to "Project Data Conversion Summary (JY997D17601A)".

*: Some data and functions are not available.

Cable

- For the details of using the GOT900 series bus connection cables, RS-422 cables and RS-232 cables with the GOT1000 series, see TECHNICAL BULLETIN No.GOT-A-0009.
- The bus connection cables, RS-422 cables and RS-232 cables for the GOT1000 series cannot be used for the GOT900 series.

Panel cutting dimension

(1) Compatibility when changing GOT900 series to GOT1000 series

- The panel cutting dimension is the same between A985GOT(-V) and GT1585, between A975/970GOT(-B) and GT157□, and F940GOT and GT155□/GT115□. Changing the mounting hole is not required.
- The panel cutting dimension is different between A95□ and GT155□/GT115□-Q□BDQ or GT115□-Q□BDA. However, the GOTs can be exchanged without changing the mounting hole.

●When using multi-channel function with GT16 or GT15

The multi-channel function monitors multiple FA devices with mounting multiple communication units on a GOT or using the standard interface.

Available combinations of connection types

(1) GT16

For GT16, the combinations of the bus or network connection, the Ethernet connection, and the serial connection are available as shown in the following table.

Bus / network connection	Ethernet connection	Serial connection
• Bus connection	• Ethernet connection	• Direct CPU connection
• MELSECNET/H connection (programmable controller to programmable controller network)	• Third party programmable controller connection (Ethernet connection)	• Computer link connection
• MELSECNET/10 connection (programmable controller to programmable controller network)	• MODBUS© /TCP connection	• CC-Link connection (via G4)
• CC-Link IE controller network connection	• Robot controller connection	• Third party programmable controller connection (serial connection)
• CC-Link connection (intelligent device station)	• CNC connection (Ethernet connection)	• Microcomputer connection
• CNC connection (MELSECNET/10 connection (programmable controller to programmable controller network), CC-Link connection (intelligent device station))		• Temperature controller connection • Inverter connection • Servo amplifier connection • CNC connection (serial connection)

The following shows the applicable combinations of connection types, the number of channels, and restricted functions.

○: Allowed △: Restricted

Item	Allowable combination of connection types	GOT to be used	Functions that are restricted by the connection type*1	
		GT1695	FA transparent function	
		GT1685	RS-232	USB
(a)	• Bus / network connection: 1 channel • Serial connection: 1 to 3 channels	Max. 4 channels	△*2	○
(b)	• Bus / network connection: 1 channel • Ethernet connection: 1 to 3 channels	Max. 4 channels	△*2	○
(c)	• Ethernet connection: 1 to 3 channels • Serial connection: 1 to 3 channels	Max. 4 channels	△*2	○
(d)	• Bus / network connection: 1 channel • Ethernet connection: 1 to 2 channels • Serial connection: 1 to 2 channels	Max. 4 channels	△*2	○
(e)	• Serial connection: 4 channels	Max. 4 channels	△*2	○
(f)	• Ethernet connection: 4 channels	Max. 4 channels	△*2	○

*1 When the functions below are used, the connectable number of channels may be restricted depending on the combination of the functions to be used.

- Bar code function
- RFID function
- Remote personal computer operation function
- Report function
- Hard copy(For printer output)
- Video/RGB display
- RGB output
- External I/O/ Operation panel
- Sound output
- Multimedia function
- Functions with the CF card unit or CF card extension unit

The video/RGB display, the RGB output, and the multimedia function cannot be used together.
The CF card unit and the CF card extension unit cannot be used at the same time.
The barcode function, the RFID function, and the remote personal computer operation function can not be used together.
For details, refer to the following.

☞ Mounting units on the GOT side interface <GT16/GT15>

*2 With the barcode function, the RFID function, or the remote personal computer operation function, the FA transparent function via the RS-232 connection is not available.

(2) GT15

For GT15, the combinations of the bus, network, or Ethernet connection and the serial connection are available as shown in the following table.

Bus / network / Ethernet connection	Serial connection
• Bus connection • MELSECNET/H connection (programmable controller to programmable controller network) • MELSECNET/10 connection (programmable controller to programmable controller network) • CC-Link IE controller network connection • CC-Link connection (intelligent device station) • Ethernet connection • Third party programmable controller connection (Ethernet connection) • MODBUS® /TCP connection • Robot controller connection • CNC connection (MELSECNET/10 connection (programmable controller to programmable controller network), CC-Link connection (intelligent device station), Ethernet connection)	• Direct CPU connection • CC-Link connection (via G4) • Microcomputer connection • Inverter connection • CNC connection (serial connection) • Computer link connection • Third party programmable controller connection (serial connection) • Temperature controller connection • Servo amplifier connection

The number of channels and the functions that can be used differ depending on the GOT to be used. The table below shows the allowable combinations of connection types, the number of channels and restricted functions.

○: Allowed △: Restricted

Item	Allowable combination of connection types	GOT to be used		Functions that are restricted by the connection type*1*2	
		GT1595 GT1585 GT157□ GT156□	GT155□	FA transparent function	
				RS-232	USB
(a)	• Bus / network / Ethernet connection: 1 channel • Serial connection: 1 to 3 channels	Max. 4 channels	Max. 2 channels	△*3	○
(b)	• Serial connection: 4 channels	Max. 4 channels	Max. 2 channels	△*3	○

*1 When the functions below are used, the connectable number of channels may be restricted depending on the combination of the functions to be used.

- Bar code function
- RFID function
- Remote personal computer operation function
- Report function
- Hard copy(For printer output)
- Video/RGB display
- RGB output
- External I/O/ Operation panel
- Sound output
- Functions with the CF card unit or CF card extension unit
- Ethernet download
- Gateway function
- MES interface function

Video/RGB display and RGB output cannot be used at the same time.
The CF card unit and the CF card extension unit cannot be used at the same time.
The barcode function, the RFID function, and the remote personal computer operation function can not be used together.
For details, refer to the following.

☞ Mounting units on the GOT side interface <GT16/GT15>

*2 When any of the connection methods below is used, Ethernet connection cannot be used although Ethernet download, gateway function and MES interface function can be used.

- Bus connection
- MELSECTNET/H connection
- MELSECNET/10 connection
- CC-Link IE controller network connection
- CC-Link connection
- MODBUS® /TCP connection

*3 With the barcode function, the RFID function, or the remote personal computer operation function, the FA transparent function via the RS-232 connection is not available.

Number of connectable channels/mountable units/mountable stages

(1) Number of connectable channels

The number of connectable channels differs according to the GOT model. Refer to the following table.

(2) Number of mountable units/mountable stages

The following describes how to add the interface on a GOT for using the multi-channel function.

(a) Mount a communication unit on the extension interface. In addition, when adding communication unit on the second stage and third stage, mount a communication unit on the already mounted unit.

(b) Mount a communication unit on the extension interface, and use the unit and the standard interface. The numbers of mountable units and mountable stages differ according to the GOT model. Refer to the following table.

*: Communication units, option units, and GOT functions have restrictions depending on the system configurations.

		GT1695 GT1685	GT1595 GT1585 GT157□ GT156□	GT155□	Description
(1)	Max. number of connectable channels	4		2	GT16: Indicates the maximum number of the communication ports (communication units and standard interfaces) that a GOT can communicate. ・ In bus connection and network connection, only 1 channel can be set for one GOT. ・ For the Ethernet connection, up to 4 channels can be set. ・ When the Ethernet interface built in the GOT is used for connection other than communication with a controller *1, the connection is not included in the count of the number of channels. ・ When the standard interface is used for connecting *2 to peripheral devices, the interface is not included in the number of channels. ☞Refer to "Calculation of current consumed by units <GT16/15>".
					GT15: Indicates the maximum number of the communication ports (communication units and standard interfaces) that a GOT can communicate. ・ Only 1 channel can be connected to one GOT for the bus connection and network connection respectively. ・ When the Ethernet communication unit is used for functions*1 other than communications with controllers, the unit is not included in the number of channels. ・ When the standard interface is used for connecting *2 to peripheral devices, the interface is not included in the number of channels. ☞Refer to "Calculation of current consumed by units <GT16/15>".
	Max.number of mountable units	5		3	Indicates the maximum number of units that can be mounted on the extension interfaces 1 and 2 of a GOT. ・ Only for the serial communication unit*3, multiple units can be mounted. ・ The option units are included in the number of units. ・ The RS-422 conversion unit is not included in the number of units. ・ Calculate the current consumed by a unit to be mounted. ☞Refer to "Calculation of current consumed by units <GT16/15>".
(2)	Max. number of mountable stages	3 (2 slots)		3 (1 slot)	Indicates the maximum number of stages for the extension interfaces 1 and 2 of a GOT. ・ Units*4*5 that occupies 2 slots must be mounted at the first stage. ・ However, when using units shown in*5, mount the units at the first stage and mount the other units at the second stage or later. ・ Units shown in*6 cannot be mounted on any units. Mount the units at the first stage. ☞Refer to "External Dimensions" in section 1.5 and "Mounting units on the GOT side interface <GT16/15>".

*1: Ethernet download, gateway function, MES interface function
*2: Bar code function, RFID function, remote personal computer operation function, FA transparent function, OS installation, project data download
*3: GT15-RS2-9P, GT15-RS4-9S, GT15-RS4-TE
*4: GT15-QBUS2, GT15-ABUS2, GT15-J71LP23-25, GT15-J71BR13, GT15-J61BT13, GT15-J71GP23-SX
*5: GT16M-V4, GT15V-75V4, GT16M-R2, GT15V-75R1, GT16M-V4R1, GT15V-75V4R1, GT16M-ROUT, GT15V-75ROUT, GT16M-MMR
*6: GT15-75QBUSL, GT15-75QBUS2L, GT15-75ABUSL, GT15-75ABUS2L, GT15-75J71LP23-Z, GT15-75J71BR13-Z, GT15-75J61BT13-Z

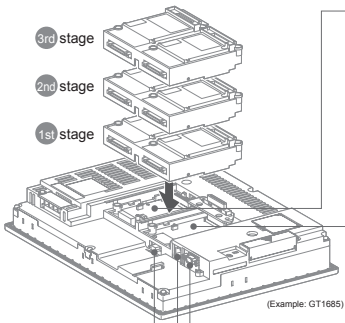
Communication driver

The communication driver must be installed for each connection type to be used.
For GT16, the communication driver is installed to the user area.
For GT15, the second or later communication driver is installed to the user area.

Option function board

When using GT16, it is not required.
When using GT15, the option function board is required.
Use an option function board of the GT15-QFNB (□M) or GT15-MESB48M. The GT15-FNB is not available.

●Mounting units on the GOT side interface <GT16/GT15>



Extension unit interface 1

Extension unit interface 2 (GT155☐ has the extension unit interface 1 only)

Up to 3 communication units and optional units can be mounted on each extension unit interface.

Mount a unit that occupies two slots on the first stage.
However, when any of the following units are used, mount the unit on the first stage, then mount other units on the second and subsequent stages.

For GT16 (Only one of these units can be mounted on the GT16)
- GT16M-V4, GT16M-R2, GT16-V4R1, GT16-ROUT, GT16M-MMR

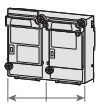
For GT15 (Only one of these units can be mounted on the GT1585V and GT1575V)
- GT15V-75V4, GT15V-75R1, GT15V-75V4R1, GT15V-75ROUT

The following units must not be stacked on other units. Mount any of them on the first stage.
- GT15-75QBUSL, GT15-75QBUS2L, GT15-75ABUSL, GT15-75ABUS2L
- GT15-75J71LP23-Z, GT15-75J71BR13-Z, GT15-75J61BT13-Z (GT16 or GT155☐ cannot be used.)

Instructions for mounting and removing the GT15-CFCD
- An extension unit cannot be mounted on a CF card unit. When extension units are mounted, mount the CF card unit on the last stage.
- When mounting a CF card unit on the extension interface 1 (left), ensure that the number of extension units mounted on the extension interface 2 (right) is smaller than the number on the extension interface 1 (left). Otherwise, the CF card cannot be inserted or removed.
- Remove the CF card unit in the designated direction (△PULL) to prevent damage to the connector.

Unit occupying two slots

Ex.: GT15-QBUS2



2 slots (1st stage) are occupied.

Standard interface (built-in RS-232 interface)

The interface can establish a serial connection with connected devices and peripheral devices, such as a barcode reader.

Standard interface (built-in Ethernet interface) (GT16 only)

The interface can establish a connection with connected devices via Ethernet.

Standard interface (built-in RS-422/485 interface) (GT16 only)

The interface can establish a serial connection with connected devices.

●Calculation of current consumed by units <GT16/15>

When using multiple units, a barcode reader, and a RFID controller, the total current consumed by the units, barcode reader and RFID controller must be less than the current that can be supplied by the GOT. Design the system using the following values so that the total current is within the range of the current supply capacity of the GOT.

(1) Current that can be supplied by the GOT

GOT model	Current supply capacity (A)
GT1695	2.4
GT1685	2.4
GT1595	2.13
GT1585 (incl. GT1585V)	1.74
GT157☐ (incl. GT1575V)	2.2
GT156☐	2.2
GT155☐	1.3

(2) Current used by units, barcode reader and RFID controller

Unit model	Consumed current (A)
GT15-QBUS	0.275*1
GT15-QBUS2	
GT15-75QBUSL	
GT15-75QBUS2L	
GT15-ABUS	0.12
GT15-ABUS2	
GT15-75ABUSL	
GT15-75ABUS2L	
GT15-RS2-9P	0.29
GT15-RS4-9S	0.33
GT15-RS4-TE	0.3
GT15-RS2T4-9P	0.098
GT15-J71E71-100	0.224
GT15-J71GP23-SX	1.07
GT15-J71LP23-25	0.56
GT15-J71BR13	0.77
GT15-J61BT13	0.56

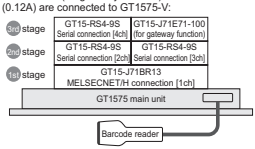
Unit model	Consumed current (A)
Barcode reader	*2
GT15-PRN	0.09
GT16M-V4	0.12 *1
GT15V-75V4	0.2 *1
GT16M-R2	0 *1
GT15V-75R1	0.2 *1
GT16M-V4R1	0.12 *1
GT15V-75V4R1	0.2 *1
GT16M-ROUT	0.11 *1
GT15V-75ROUT	0.11
GT16M-MMR	0.27 *1
GT15-CFCD	0.07
GT15-CFEX-C08SET	0.15
GT15-SOUT	0.08
GT15-DIO	0.1
GT15-DIOR	0.1
RFID controller	*2

*1 : This value is used for calculating the current consumption of multi-channel functions. For the specifications of each unit, see the manual supplied with each unit.

*2 : When using a barcode reader or a RFID controller to which the power is supplied from the standard interface, add the current to be used by the barcode reader and RFID controller at 5VDC. (Maximum less than 0.3A)

(3) Calculation example

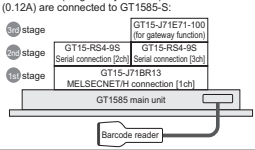
(a) When GT15-J71BR13, GT15-RS4-9S (3 units), GT15-J71E71-100 (for gateway function) and barcode reader (0.12A) are connected to GT1575-V:



Current supply capacity of GOT (A)	Total current to be consumed (A)
2.2	0.77+0.33+0.33+0.33+0.224+0.12=2.104

Since the total current is within the current supply capacity of the GOT, the units can be used.

(b) When GT15-J71BR13, GT15-RS4-9S (2 units), GT15-J71E71-100 (for gateway function) and barcode reader (0.12A) are connected to GT1585-S:



Current supply capacity of GOT (A)	Total current to be consumed (A)
1.74	0.77+0.33+0.33+0.224+0.12=1.774

Not allowed to use because the current exceeds the current supply capacity of the GOT.

License key for GT SoftGOT1000

(1) License key

A license key is required for using GT SoftGOT1000.
The license key includes the following two types.

Model	Description
GT15-SGTKEY-U	For connecting to USB port
GT15-SGTKEY-P *1	For connecting to parallel port

*1: Not available with the PC CPU module that has no parallel port.
Use the GT15-SGTKEY-U.

(a) How to use license key
Be sure to connect a license key to the target device before monitoring with GT SoftGOT1000.
When monitoring is started without the license key, GT SoftGOT1000 automatically ends in approximately two hours.
Do not remove the license key during monitoring.
When the license key is removed during monitoring, GT SoftGOT1000 automatically ends.

(b) Before connecting license key
The OS recognizes a license key as a controller.
Therefore, install the system driver (device driver) as in the case of the other controllers.
The license key is accessed via the system driver. When the system driver is not installed, the license key cannot be accessed.

(c) Applicable target of license keys
The GT15-SGTKEY-U and GT15-SGTKEY-P are dedicated to GT SoftGOT1000.
The license keys are not applicable to GT SoftGOT2.

(2) When connecting GT15-SGTKEY-U

(a) Precautions for installing or uninstalling system driver
Remove the GT15-SGTKEY-U before installing or uninstalling the system driver.
When installing the system driver with the GT15-SGTKEY-U connected, the installation of USB may fails.
When the installation fails, uninstall the system driver with the GT15-SGTKEY-U removed, and then install the system driver again.

(3) When connecting GT15-SGTKEY-P

(a) Available port for GT15-SGTKEY-P

The GT15-SGTKEY-P can be used with the parallel port mounted on a personal computer by default.

The GT15-SGTKEY-P is not applicable to parallel ports extended or connected via a converter.

(b) When using GT15-SGTKEY-P with other devices

The following devices cannot be used at the same port as that for the GT15-SGTKEY-P.

- SCSI interface for parallel port
- Floppy disk drive, hard disk drive, CD-ROM or ZIP drive connected to parallel port
- Devices with data transfer methods that the specifications are out of the standard specification for the communication method via a parallel port (Interlink network, Centronics printer interface, and others)

(c) Precautions for connecting GT15-SGTKEY-P

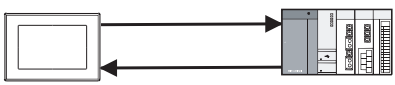
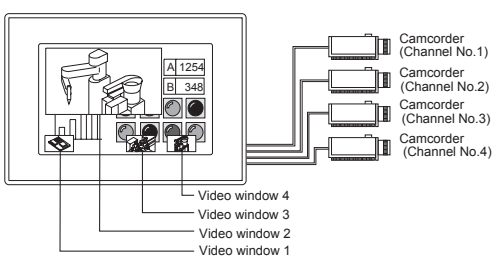
Connect the GT15-SGTKEY-P between the printer switching device and a personal computer.

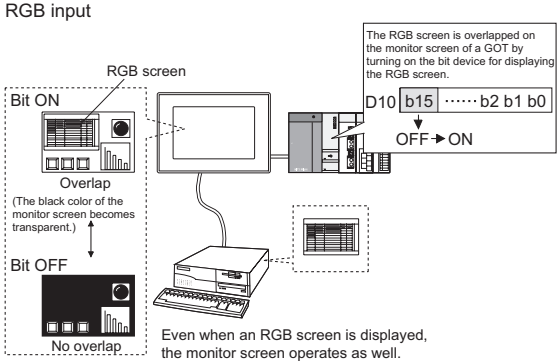
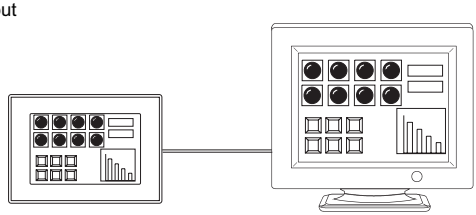
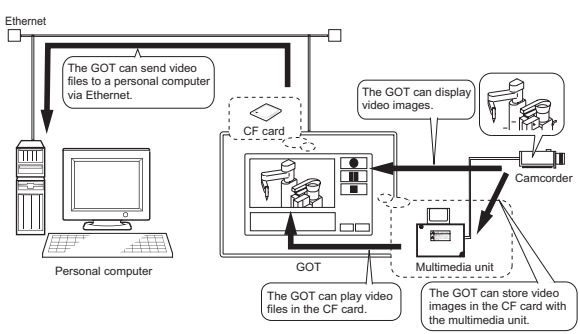
(4) When using system driver

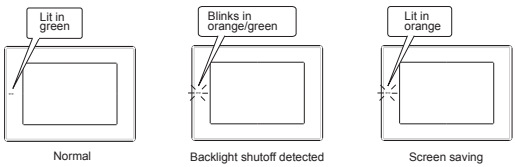
Use a system driver included in GT Works2 Version2/GT Designer2 Version2 of Ver 2.25B or later.

For using a system driver of Ver 2.25B or earlier, though the GT15-SGTKEY-P can be used, the GT15-SGTKEY-U cannot be used.

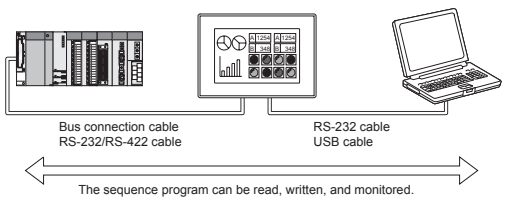
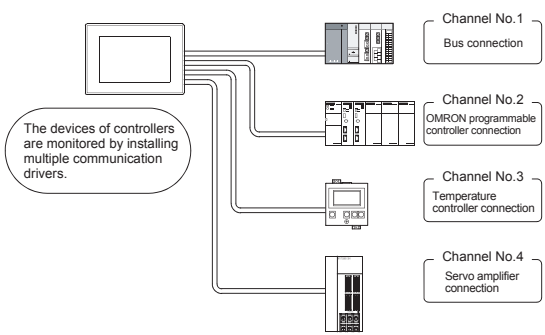
●Hardware specifications

Function	Overview	Reference
Clock function GT16 GT15 GT Soft GOT1000 GT11 GT10	Manages the clock data of a GOT. The clock data can be selected as a standard for adjusting the time. Broadcast Adjusts the time of the programmable controller CPU clock data to the clock data of the GOT.  Adjust Adjusts the time of the GOT clock data to the clock data of a programmable controller CPU.	☞ Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG] ☞ Chapter 9 in GT16 User's Manual [SH-080778ENG] ☞ Chapter 12 in GT15 User's Manual [SH-080528ENG] ☞ Chapter 12 in GT11 User's Manual [JY997D17501] ☞ Chapter 13 in GT10 User's Manual [JY997D24701] ☞ Chapter 43 in Handy GOT User's Manual [JY997D20101]
Video input GT16 GT15	Displays the image taken with a camcorder on a video window. The video window operates independently of other screens. While opening the video window, base screens can be switched.  	☞ Chapter 13 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG] ☞ Chapter 44 in GOT1000 Series Connection Manual [SH-080532ENG]

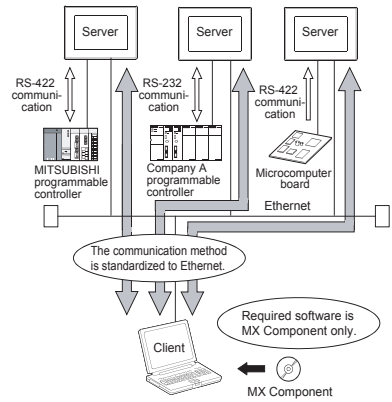
Function	Overview	Reference
RGB input/ RGB output GT16 GT15	Displays a screen of a personal computer on the GOT and outputs a GOT screen to a commercially-available display. The RGB screen can be used with XGA (1024 × 768 dots), SVGA (800 × 600 dots), or VGA (640 × 480 dots). (XGA (1024 × 768 dots) can be selected only for the GT1695M-X.) The RGB screen is displayed on the monitor screen of a GOT by the ON/OFF status of the device (bit device in the word device). ・ RGB input  Even when an RGB screen is displayed, the monitor screen operates as well. ・ RGB output  When executing the RGB output, set the RGB output in the communication settings.	☞ Chapter 13 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG] ☞ Chapter 44 in GOT1000 Series Connection Manual [SH-080532ENG]
Multimedia function GT16	This function enables to display or record video images taken by a camcorder connected to a multimedia unit and play video files stored in a CF card. Recorded video images can be stored in the CF card with the multimedia unit. Stored video files can be sent to a personal computer via Ethernet. 	☞ Chapter 13 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG] ☞ Chapter 9 in GT16 User's Manual [SH-080778ENG]

Function	Overview	Reference
Backlight shutoff detection function GT16 GT15 GT11	Detects the backlight shutoff of a LCD and indicates the backlight shutoff with the POWER LED on the GOT front face.  * Cannot be used for GT1030 and GT1020.	☞ Chapter 9 in GT16 User's Manual [SH-080778ENG] ☞ Chapter 19 in GT15 User's Manual [SH-080528ENG] ☞ Chapter 17 in GT11 User's Manual [JY997D17501] ☞ Chapter 18 in GT10 User's Manual [JY997D24701] ☞ Chapter 50 in Handy GOT User's Manual [JY997D20101]

●Main unit functions

Function	Overview	Reference
FA transparent function GT16 GT15 GT11 GT10	Enables a personal computer to read, write, and monitor a sequence program of the MITSUBISHI programmable controller via a GOT connected to the programmable controller and the personal computer. The software version applicable to the FA transparent function differs depending on the software. 	☞ Chapter 50 in GOT1000 Series Connection Manual [SH-080532ENG] ☞ Chapter 39 in Handy GOT User's Manual [JY997D20101]
Multi-channel function GT16 GT15	Monitors up to four controllers (four channels), including a programmable controller CPU, a temperature controller, and an inverter, on one GOT with multiple communication drivers installed. For specifications and precautions of the multi-channel function, refer to "Precautions for Use" in section 3.2. 	☞ Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG] ☞ Chapter 49 in GOT1000 Series Connection Manual [SH-080532ENG]

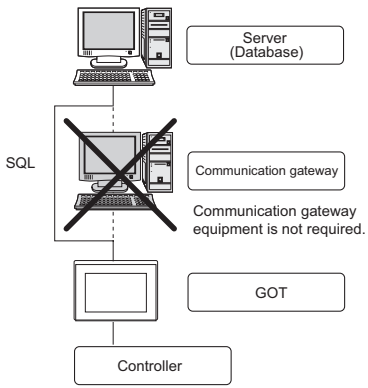
Function	Overview	Reference
Gateway function GT16 GT15	Monitors controllers of various manufacturers on one GOT or personal computer, and sends alarms occurred on the GOT by e-mail. The function supports remote monitoring and remote maintenance of a production site from an office.	☞ Chapter 15 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG] ☞ Chapter 52 in GOT1000 Series Connection Manual [SH-080532ENG] ☞ GOT1000 Series Gateway Functions Manual [SH-080545ENG]



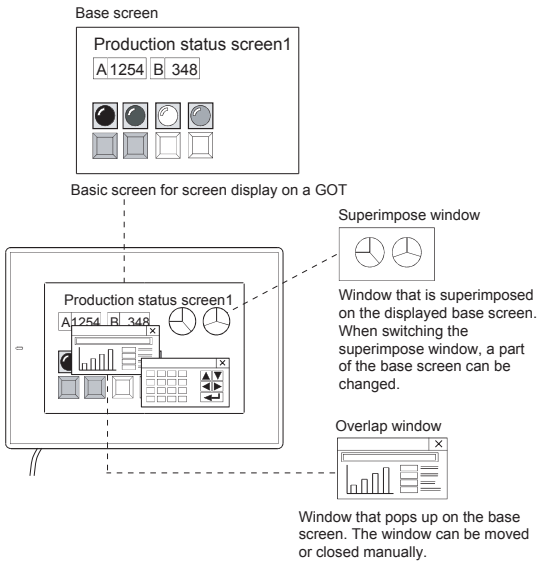
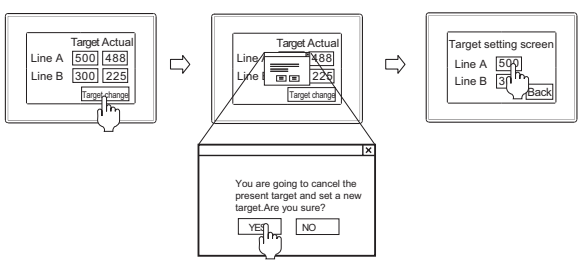
[Available connection type for gateway function]

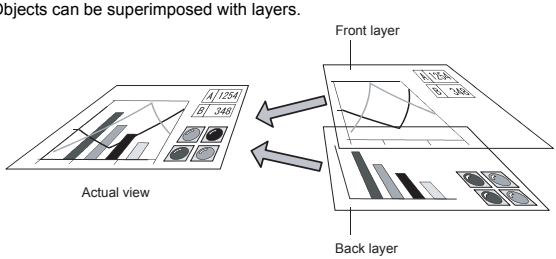
Connection type between GOT and programmable controller		
MITSUBISHI programmable controller connection *5	Bus connection	
	Direct CPU connection	
	Computer link connection	
	MELSECNET/H connection (programmable controller to programmable controller network)	
	MELSECNET/10 connection (programmable controller to programmable controller network) *1	
	CC-Link IE controller network connection	
	CC-Link connection (intelligent device station) *2*3	
	CC-Link connection (via G4)	
	Ethernet connection	
Third party programmable controller connection	Serial connection *4	
	Ethernet connection	
	MODBUS®/TCP connection	
Microcomputer connection		
Temperature controller connection *4		
Robot controller connection *6		
CNC connection *7	Direct CPU connection	
	MELSECNET/10 connection (programmable controller to programmable controller network) *1	
	CC-Link connection (intelligent device station) *2	
	Ethernet connection	

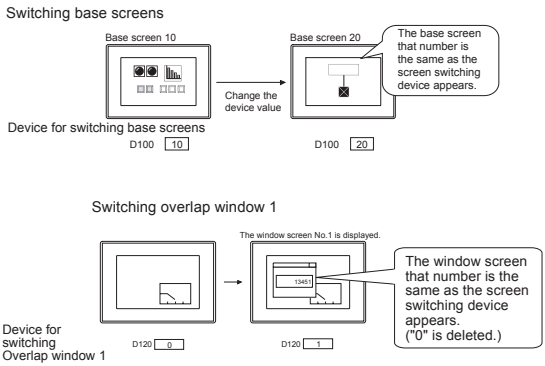
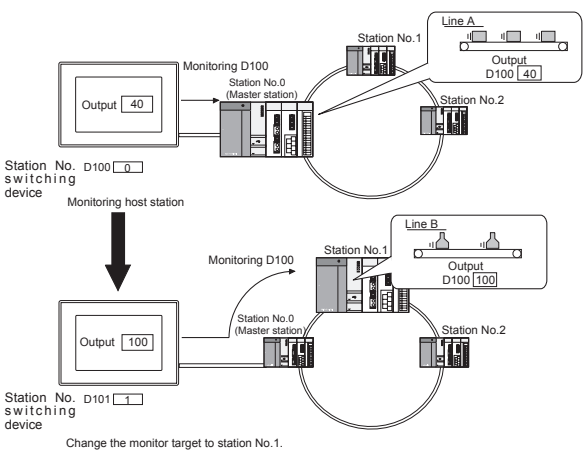
*1: When using the MELSECNET/10 connection, use the MELSECNET/H communication unit. The MELSECNET/10 communication unit is not available.
*2: When using the CC-Link connection, use the CC-Link communication unit (GT15-J61BT13). The CC-Link communication unit (GT15-75J61BR13-Z) is not available.
*3: The GT16 is applicable to the CC-Link (ID) Ver.2 only.
*4: When connecting a GOT to controllers below, the server/client function is not available.
・JTEKT programmable controller ・SHINKO indicating controller
*5: Including connection to the motion controller CPU (Q series and A series), CNC C70, and CRnQ-700
*6: Available only for the CRnD-700.
For the CRnQ-700, refer to the above Mitsubishi programmable controller connection.
*7: Available only for the MELDAS C6/C64.
For the CNC C70, refer to the above Mitsubishi programmable controller connection.

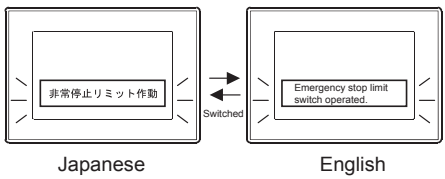
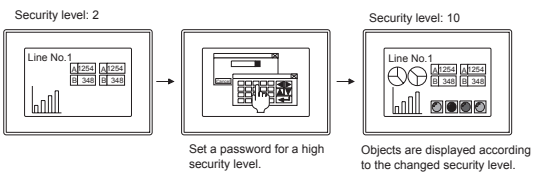
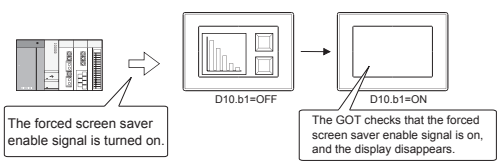
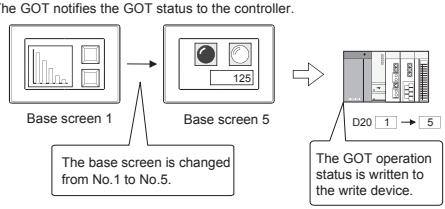
Function	Overview	Reference
MES interface function GT16 GT15	Sends the SQL text from the GOT to the database in the server computer connected via the Ethernet connection, and writes device values of the GOT to the database or reads database values to set the values for the GOT device. When the GOT communicates directly with the server computer, the gateway equipment for communications is not required. The function enables reducing the maintenance cost and improving reliability. 	☞ Chapter 15 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG] ☞ Chapter 53 in GOT1000 Series Connection Manual [SH-080532ENG] ☞ GOT1000 Series MES Interface Function Manual [SH-080654ENG]

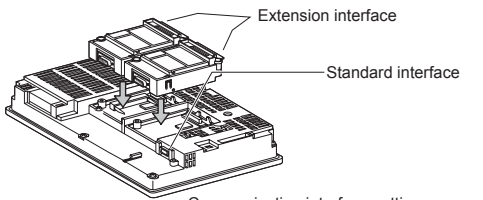
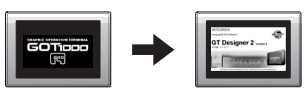
●Screen design

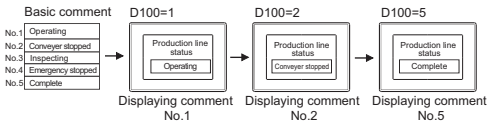
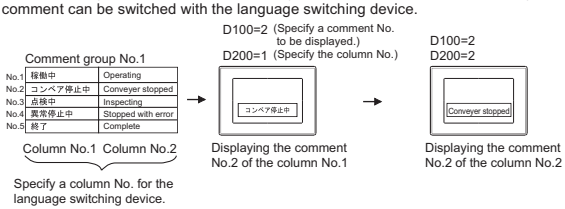
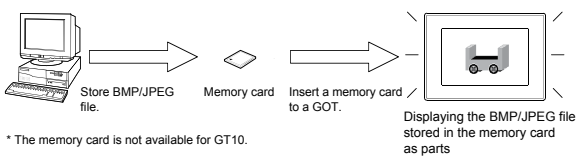
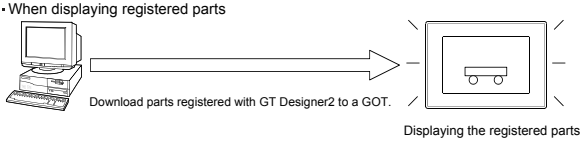
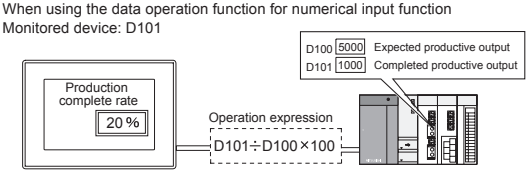
Function	Overview	Reference
Base screen **Superimpose window display** **Overlap window display** GT16 GT15 GT Soft GOT1000 GT11 GT10		Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]
Dialog window display GT16 GT15 GT Soft GOT1000 GT11	Displays user-customized system messages and user-created messages on the GOT with dialog windows.  A dialog window such as guiding an operator to confirm the operation can be created and displayed.	Chapter 3 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]

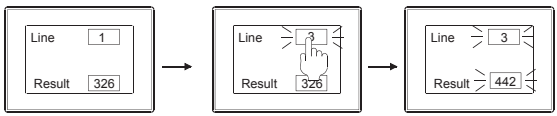
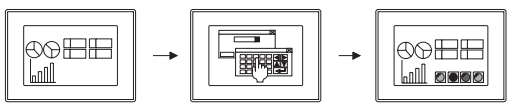
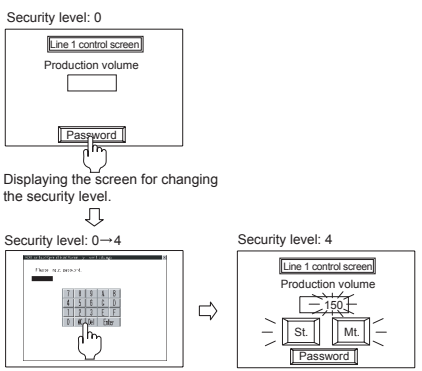
Function	Overview	Reference
Figure drawing	Displays figures drawn by the user, characters, and the BMP, DXF, and IGES format data imported with the drawing software on the GOT. (JPEG is available only for GT16, GT15 and GT SoftGOT1000. IGES is available only for GT16, GT15, GT SoftGOT1000, and GT11.)  BMP, JPEG and other files  Figure  Character	☞ Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]
Font Standard font *1 12dot Standard(Gothic) 16dot Standard(Gothic) 16dot Standard(Mincho) *1 HQ font 12dot HQ Mincho 12dot HQ Gothic 16dot HQ Mincho 16dot HQ Gothic TrueType font TrueType Mincho True Type Gothic TrueType font Numerical Gothic 7-Segment 12345 Windows® font Windows font Stroke font *3 Stroke *1: Not available for GT1020. *2: Not available for GT10. *3: Not available for GT11 and GT10.	Displays a wide variety of fonts, including the standard font compatible with Unicode 2.1 and the fonts available for Windows® .	☞ Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]
Kanji region	Some Chinese characters look different even with synonyms depending on the region where Chinese characters are used (Japanese kanji, simplified Chinese or traditional Chinese). With the function, Chinese characters in each region can be displayed. (For GT11, Japanese kanji and simplified Chinese can be displayed by installing an applicable standard font. Traditional Chinese cannot be displayed.)  Japanese / Simplified Chinese - Mincho / Traditional Chinese - Gothic	☞ Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]
Object super-imposition (layers)	Superimposes two types of sheets (layers) and displays the sheets as one screen. Objects can be superimposed with layers. 	☞ Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]

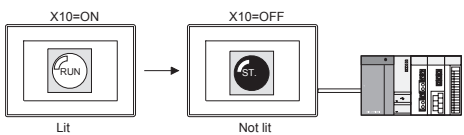
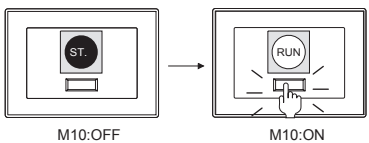
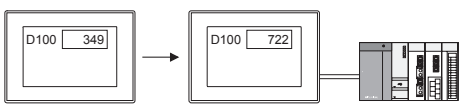
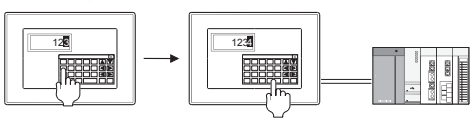
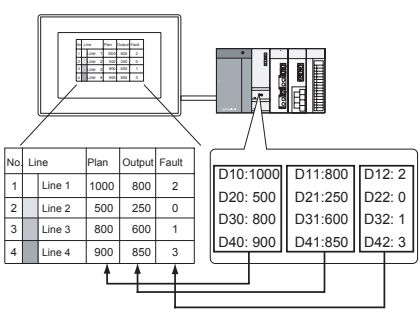
Function	Overview	Reference
Screen switching	Switches the screen displayed on a GOT with the device value for switching screen. 	☞ Chapter 3 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]
Station No. switching	Switches the station No. of a controller to be monitored by setting the device value for switching station No. When the same kind of multiple machines are connected to the network, the multiple machines can be monitored on one monitor screen. 	☞ Chapter 3 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]

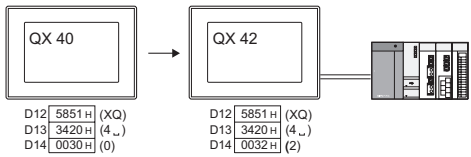
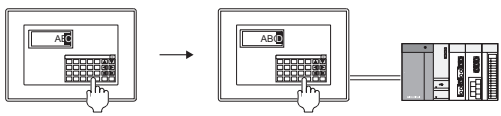
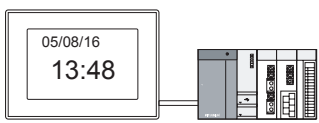
Function	Overview	Reference
Language switching function GT16 GT15 GT Soft GOT1000 GT11 GT10	Switches the language of a comment to be displayed by setting the device value for language switching when multiple languages is registered in each column of a comment group. 	☞ Chapter 3 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]
Password setting GT16 GT15 GT Soft GOT1000 GT11 GT10	Sets passwords for displays, operations, upload operations, and utility operations of objects and screens. The setting of each password restricts the user for the operation. 	☞ Chapter 3 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]
System information GT16 GT15 GT Soft GOT1000 GT11 GT10	Controls GOT operations, including erasing screens and disabling the key input, from a controller and notifies the GOT status to a controller according to the data written to the device. The controller controls GOT operations.  The GOT notifies the GOT status to the controller. 	☞ Chapter 3 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]

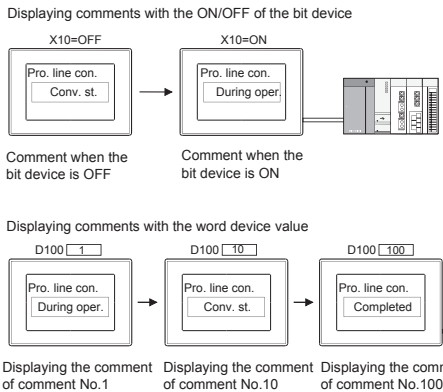
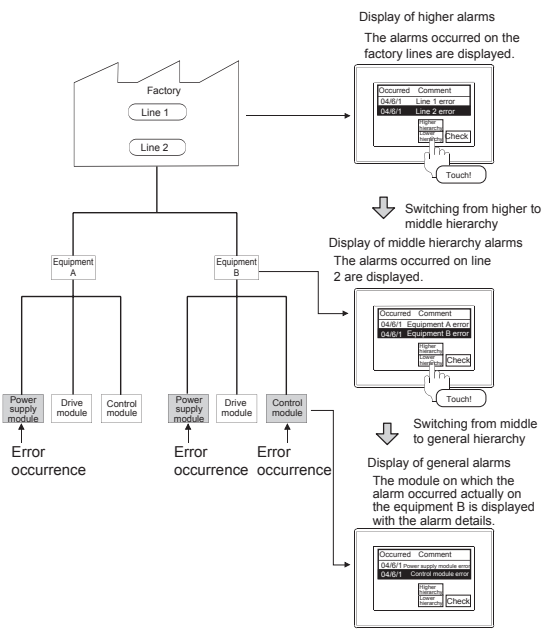
Function	Overview	Reference
Commu-nication settings 	Sets the connection type and the communication interface for communications between the GOT and a controller.  Communication interface setting (Example with the multi-channel function)  Communication driver setting Programmable controller CPU	☞ Chapter 3 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG] ☞ Chapter 10 in GT16 User's Manual [SH-080778ENG] ☞ Chapter 10 in GT15 User's Manual [SH-080528ENG] ☞ Chapter 10 in GT11 User's Manual [JY997D17501] ☞ Chapter 11 in GT10 User's Manual [JY997D24701]
Startup logo 	Changes the logo displayed when starting the GOT to any BMP screens. At the GOT startup  Original The set BMP screen is displayed.	☞ Chapter 3 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]

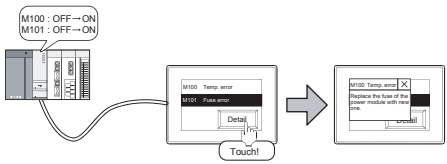
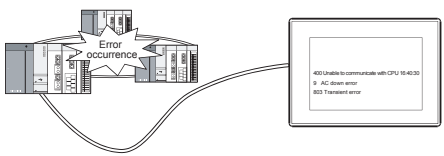
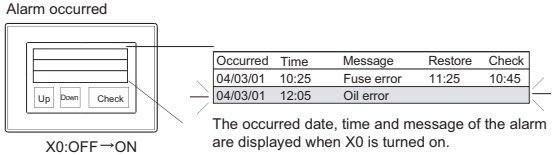
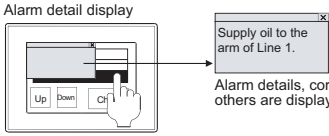
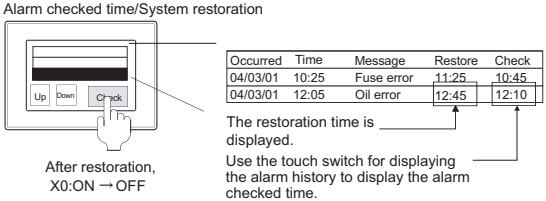
Function	Overview	Reference
Comment registration	Registers character strings created by the user as a comment. The registered comments can be displayed with multiple object functions. The comment includes the basic comment and the comment group. (Available font for the basic comment is only 16dot(Standard/HQ Mincho).) ▪ Basic comment display example The comment corresponding to the comment No. that is the same as the device value is displayed with the comment display function.  ▪ Comment group display The comment corresponding to the comment No. that is the same as the device value is displayed with the comment display function. The column of the displayed comment can be switched with the language switching device. 	☞ Chapter 4 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]
Part registration	Registers figures created by the user as parts. The registered parts can be displayed with object functions. ▪ When displaying BMP/JPEG files set as parts  * The memory card is not available for GT10. ▪ When displaying registered parts 	☞ Chapter 4 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]
Data operation function	Executes the calculations set in the data operation for the word device values, and monitors or writes with the calculated values. When using the data operation function for numerical input function Monitored device: D101 	☞ Chapter 5 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]

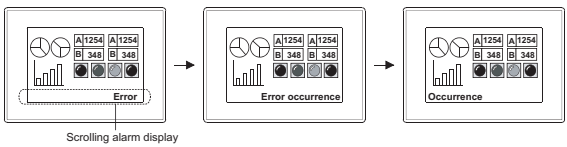
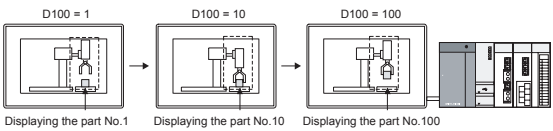
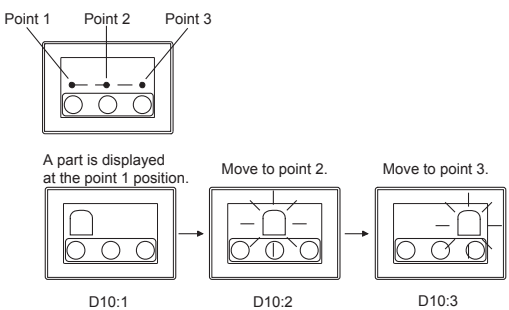
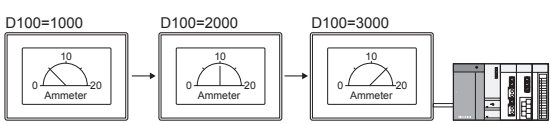
Function	Overview	Reference
Offset function GT16 GT15 GT Soft GOT1000 GT11 GT10	Monitors multiple devices by switching the devices with one device setting. When switching display from Line 1 to Line 3 D100=326 D300=442  The result of Line 1 (D100) is monitored. Switch a Line to be monitored. The result of Line 3 (D300) is monitored.	☞ Chapter 5 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]
Security function GT16 GT15 GT Soft GOT1000 GT11 GT10	Limit the screen displays depending on the security level of the user. The authentic method for changing security levels includes the security level authentication and the operator authentication. • Operator authentication The method authenticates the user with the operator name and password corresponding to the security level when the security level is changed. Security level: 2 Security level: 10  Set an operator name and a password for a high security level. Objects are displayed according to the changed security level. *1: Not available for GT11 and GT10. • Security level authentication The method authenticates the user with the password for each security level when the security level is changed. Changing the security level from 0 to 4  Input the password of security level 4. Objects limited by the security function are displayed.	☞ Chapter 5 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]

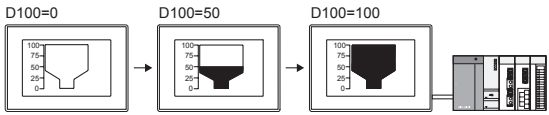
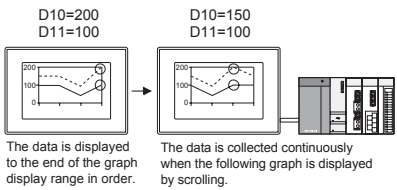
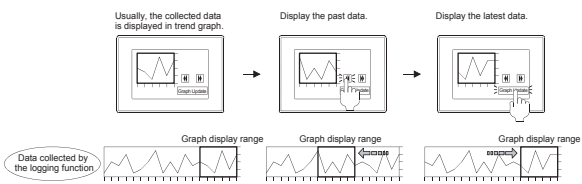
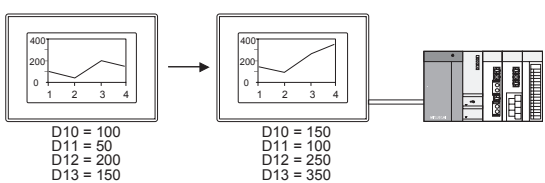
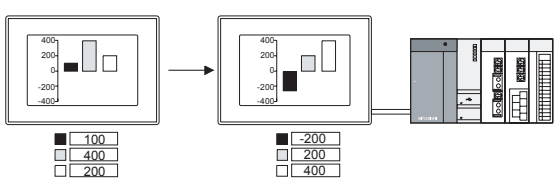
Function	Overview	Reference
Lamp display	Changes lamp colors according to the ON/OFF status of the bit device or the word device value. Bit lamp 	Chapter 6 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]
Touch switch	Turns bit devices on or off and switches the GOT screens with touching the screen. 	Chapter 6 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]
Numerical display/ Numerical input	Displays the data stored in devices of a controller as numeric values on a GOT or writes any values from a GOT to devices of a controller. Numerical display  Numerical input  Use touch switches or a key window to input a value.	Chapter 7 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]
Data list	Displays multiple word device values in a list. The line number and ruled lines of a list are automatically displayed. 	Chapter 7 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]

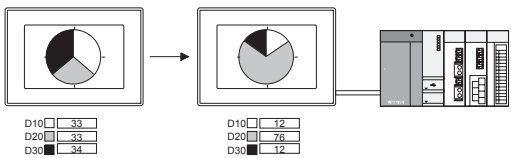
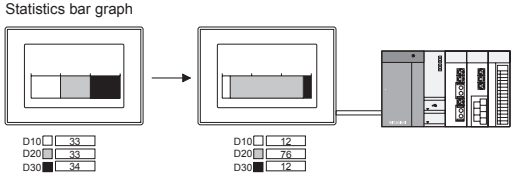
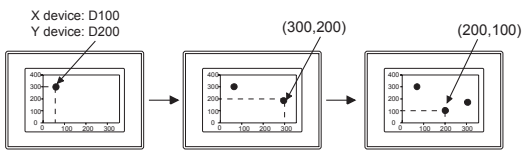
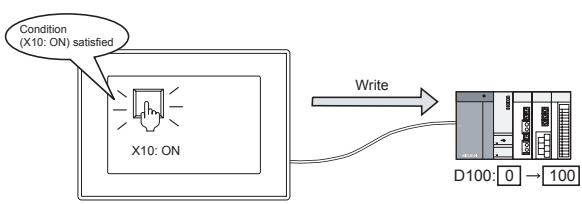
Function	Overview	Reference
ASCII display/ ASCII input 	Recognizes the data stored in the word device as the character code. The function displays character strings or writes the input characters to the word device with the character code. ASCII display  ASCII input  Use touch switches or a key window to input characters. D10 0000H D11 0000H Use the write key (key code: 000DH) to write the input characters with the character code. D10 4241H (BA) D11 4443H (DC)	☞ Chapter 7 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]
Clock display 	Displays the date and time on a GOT.  * GT16, GT15, GT11, GT105□ and GT1030: The clock data of a GOT or programmable controller CPU is used. GT SoftGOT1000: The clock data of a personal computer is used. GT1020: The clock data of a programmable controller CPU is used.	☞ Chapter 7 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]

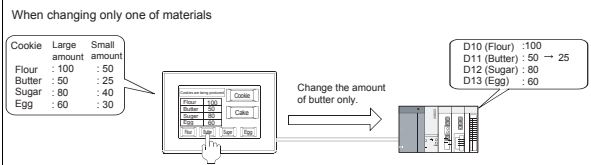
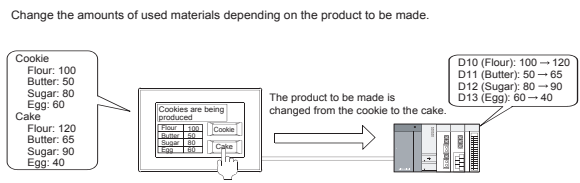
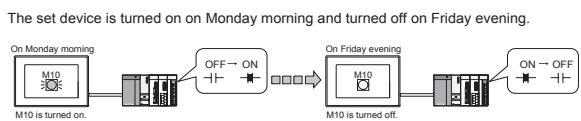
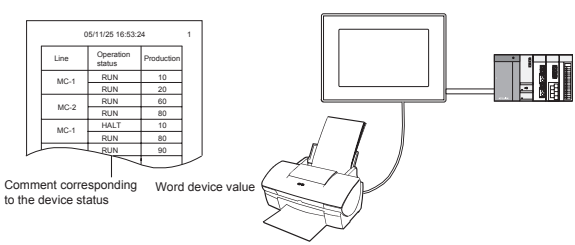
Function	Overview	Reference
Comment display	Displays a comment corresponding to the ON/OFF status of the bit device or the word device value. 	Chapter 7 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]
Advanced alarm observation/ display	Function that is more advanced than conventional alarm functions (system alarm and user alarm). Comments for an alarm can be displayed in three hierarchies (higher, middle and general hierarchies). When an alarm occurs in a large system, details of the alarm occurrence can be displayed. 	Chapter 8 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]

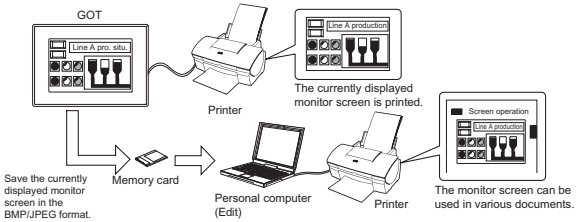
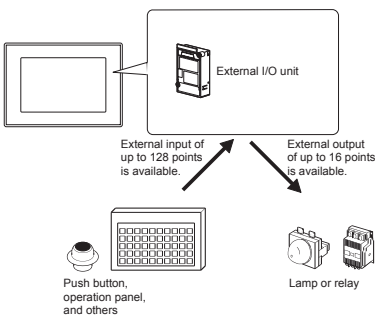
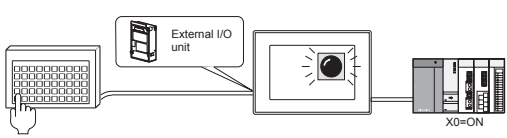
Function	Overview	Reference
Alarm list display	Displays user-created alarms (user alarm) and system errors (system alarm). (Only the user alarm is available for GT10.) User alarm display Use the function to display the alarm created by the user.  System alarm display Use the function to display the controller, GOT, and network errors. 	☞ Chapter 8 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]
Alarm history display	Saves the times and comments of alarm occurrences in the built-in memory of the GOT, and displays the saved data as a history list. Alarm occurred  Alarm detail display  The window for displaying details is any of the comment window, base screen, or window screen. Alarm checked time/System restoration 	☞ Chapter 8 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]

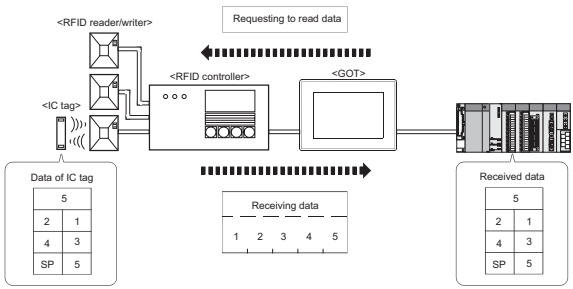
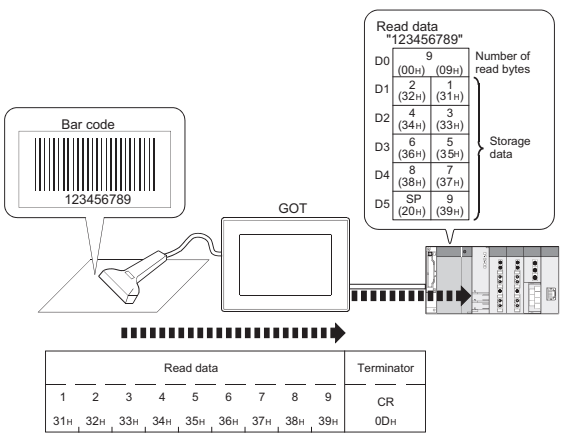
Function	Overview	Reference
Scrolling alarm display	Enables user-created comments to scroll across the screen from right to left when an alarm occurs. A comment is repeatedly displayed until causes of the alarm are removed. The comment display position can be selected from among the top, center, and bottom of the base screen. The comment corresponding to the occurred alarm scrolls across the screen from right to left. 	☞ Chapter 8 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]
Parts display	Displays registered parts according to the device status. 	☞ Chapter 9 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]
Parts movement	Changes the part position and displays the part at the changed position by setting the word device value. When executing parts movement display with specifying [Point] 	☞ Chapter 9 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]
Panelmeter display	Displays the percentage of the word device value between the upper and lower limit values in a meter (needle movement). 	☞ Chapter 10 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]

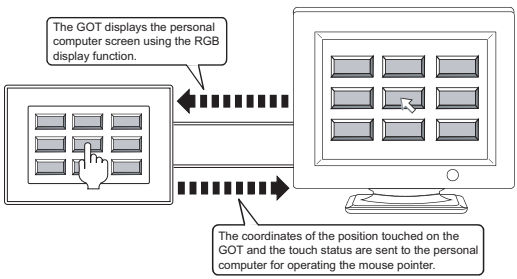
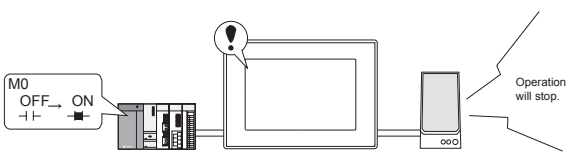
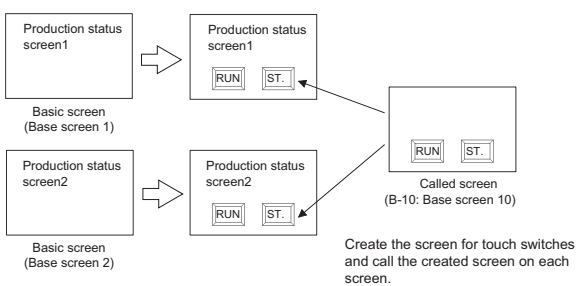
Function	Overview	Reference
Level display	Fills a range equivalent to the percentage of the word device value between the upper and lower limit values. 	Chapter 10 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]
Trend graph	Continuously collects word device data and displays the collected data in a trend graph. 	Chapter 10 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]
Historical trend graph	Displays the device data collected with the logging function in a trend graph in time sequence. 	Chapter 10 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]
Line graph	Collects multiple word device data in block and displays the collected data in a line graph. 	Chapter 10 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]
Bar graph	Collects word device data and displays the collected data in a bar graph. 	Chapter 10 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]

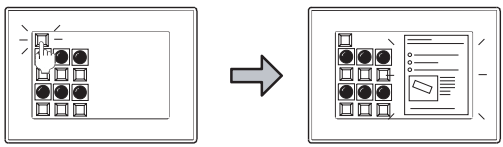
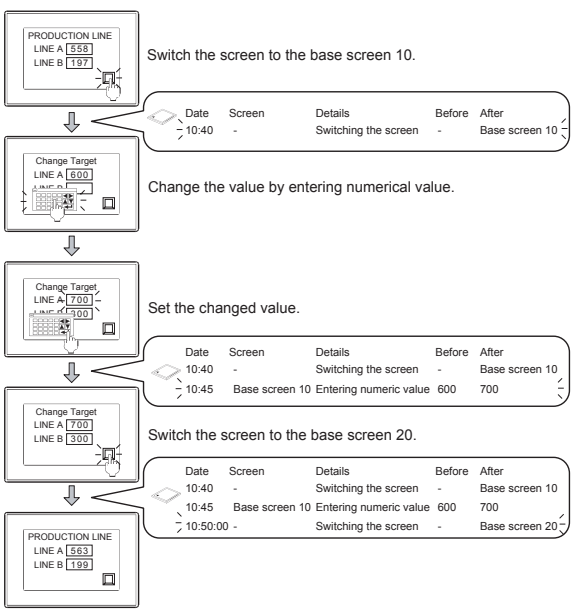
Function	Overview	Reference
Statistics graph	Displays the data ratio of collected multiple word devices to the total data in a statistics pie/bar graph. Statistics pie graph  Statistics bar graph 	Chapter 10 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]
Scatter graph	Displays two word device values as points on an x-y coordinate system on a graph. 	Chapter 10 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]
Status observation function	Turns a device on/off and writes a device value when the specified conditions are met. 	Chapter 11 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]

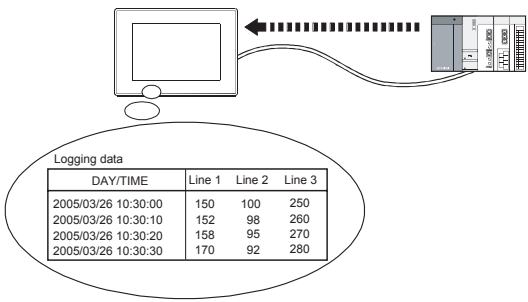
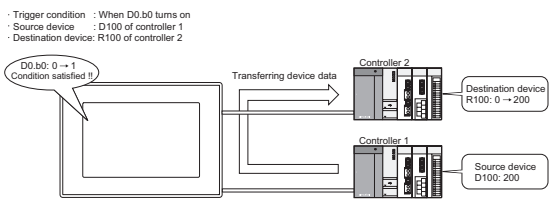
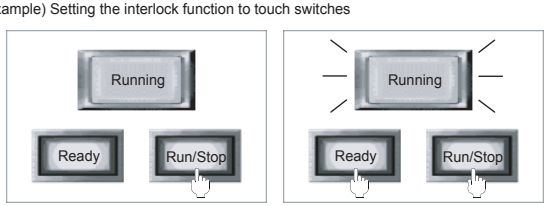
Function	Overview	Reference
Advanced recipe function GT16 GT15 GT Soft GOT1000	Function that is more advanced than the recipe function The available number of recipe settings, device points or records is increased. In addition, the advanced recipe setting and the record are combined to create flexible recipe data. 	☞ Chapter 12 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]
Recipe function GT16 GT15 GT Soft GOT1000 GT11 GT10	Stores data (device values) such as blend and processing conditions of materials in a GOT and writes/reads the required data from/to the GOT to/from a programmable controller. 	☞ Chapter 12 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]
Time action function GT16 GT15 GT Soft GOT1000 GT11 GT10	Turns the bit device on/off, writes the value to the word device or performs other operations at the set day or time. The function is enabled with the day or time of the GOT. 	☞ Chapter 11 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]
Report function GT16 GT15 GT Soft GOT1000	Collects the data of the production management and status, and then prints the collected data. The following data can be printed with the function. • Word device value • Comment corresponding to the device status  * The following communication units cannot be mounted on the printer unit. • Bus connection unit (thinned type): GT15-75QBUS(2)L, GT15-75ABUS(2)L • MELSECNET/10 communication unit: GT15-75J71LP23-Z, GT15-75J71BR13-Z • CC-Link communication unit: GT15-75J61BT13-Z	☞ Chapter 13 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG] ☞ Chapter 44 in GOT1000 Series Connection Manual [SH-080532ENG]

Function	Overview	Reference
Hard copy function	Prints the monitor screen currently displayed on the GOT with a printer or saves the monitor screen currently displayed on the GOT to a memory card in the BMP/JPG file format. The BMP/JPEG files saved in the memory card can be used for various documents on a personal computer.  * The following communication units cannot be mounted on the printer unit. • Bus connection unit (thinned type): GT15-75QBUS(2)L, GT15-75ABUS(2)L • MELSECNET/10 communication unit: GT15-75J71LP23-Z, GT15-75J71BR13-Z • CC-Link communication unit: GT15-75J61BT13-Z	☞ Chapter 13 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG] ☞ Chapter 44 in GOT1000 Series Connection Manual [SH-080532ENG]
External I/O function	Executes external inputs and external outputs (lamp and relay) with the external I/O unit. When using the external I/O function, the setting of GT Designer2 is not required. 	☞ Chapter 13 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG] ☞ Chapter 42 in GOT1000 Series Connection Manual [SH-080532ENG]
Operation panel function *	With the external I/O unit, input operations, including the touch input, numerical input, and screen switching, can be operated with an operation panel. When using the operation panel function, the operation panel must be set with GT Designer2.  Press the key that are set to turn on X0. * With the keyboard input function, operations equivalent to the ones with the operation panel function are available for GT SoftGOT1000.	☞ Chapter 13 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]

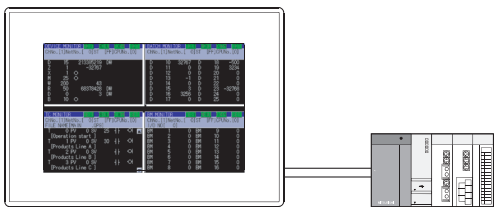
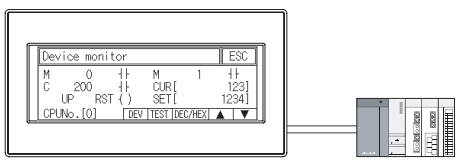
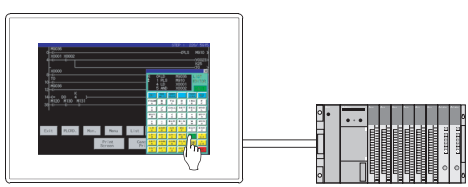
Function	Overview	Reference
RFID Function GT16 GT15 GT Soft GOT1000	Enables the GOT to write data received by a RFID reader/writer of a RFID controller connected to the GOT into devices. Connect the RFID controller to the RS-232 interface of the GOT. 	☞ Chapter 13 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG] ☞ Chapter 48 in GOT1000 Series Connection Manual [SH-080532ENG]
Bar code function GT16 GT15 GT Soft GOT1000 GT11 GT10	Connects the bar code reader to a GOT to write the data read by the bar code reader to a controller. The bar code reader is connected to RS-232 interface of a GOT. 	☞ Chapter 13 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG] ☞ Chapter 43 in GOT1000 Series Connection Manual [SH-080532ENG]

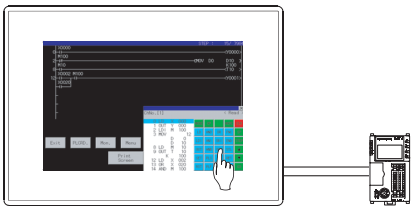
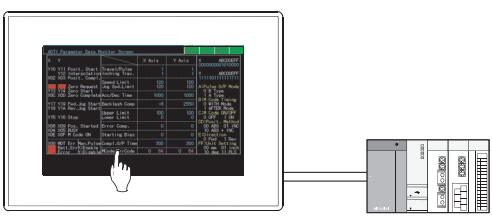
Function	Overview	Reference
Remote personal computer operation function GT16 GT15	The function enables to operate the mouse pointer on a personal computer by touching the personal computer screen displayed on the GOT using the RGB display function. 	☞ Chapter 13 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]
Sound output function GT16 GT15 GT Soft GOT1000	Outputs sounds with speakers connected to the GOT. The sound output is applicable to the following functions. • Touch switch function • Status observation function • Time action function For using the sound output function with the GOT, register sound files.  The specified sound file is output when set conditions are met (When M0 turns on.).	☞ Chapter 13 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG] ☞ Chapter 41 in GOT1000 Series Connection Manual [SH-080532ENG]
Set overlay screen function GT16 GT15 GT Soft GOT1000 GT11 GT10	Calls other base screens or window screens to place on a basic screen and displays the called screens as one screen. When setting the same objects on multiple screens, the memory capacity can be saved.  Create the screen for touch switches and call the created screen on each screen.	☞ Chapter 15 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]

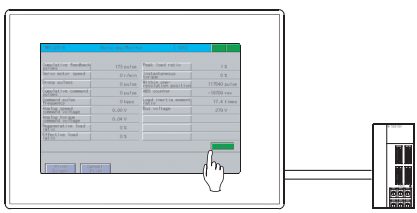
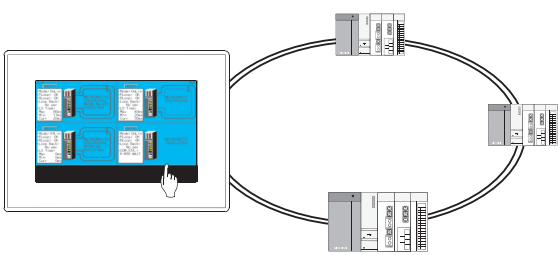
Function	Overview	Reference
Document display function GT16 GT15 GT Soft GOT1000	Enables displaying documents created with applications, including Microsoft® Word and Microsoft® Excel, on the GOT. Documents, including specifications and manuals, can be displayed on the GOT. Therefore, documents can be used on a screen for troubleshooting, and documents for operations can be displayed during monitoring.  Documents for operating switches and others are displayed on the GOT.	Chapter 15 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]
Operation log function GT16 GT15 GT Soft GOT1000	Saves GOT operation data by the user in a memory card as a history. When troubles occur at production sites, the operation history can be used to identify the cause of the troubles. The saved operation history can be checked by the following methods. • Display the operation history with the GOT utility. • Save the operation history as a CSV file or Unicode text file and display the saved operation history on a personal computer. 	Chapter 15 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]

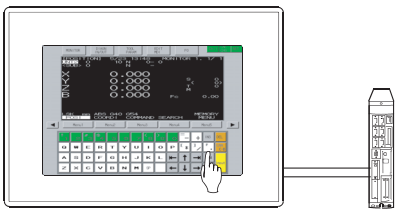
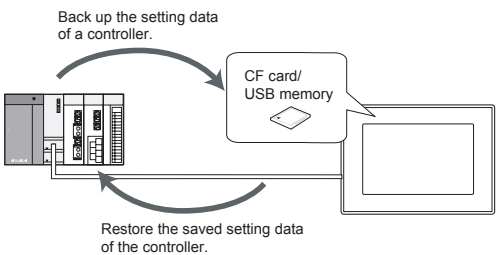
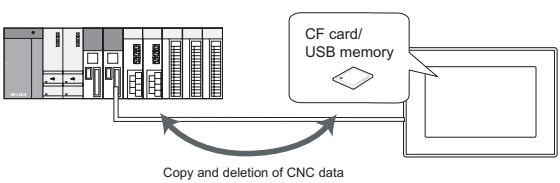
Function	Overview	Reference
Logging function	Collects and stores device values of a controller at an arbitrary timing or intervals. The collected data can be displayed as a historical trend graph. The collected data is also displayed on a personal computer with saving the data as a CSV file or Unicode text file. 	Chapter 11 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]
Device data transfer function	Enables the GOT to read values of specified devices and write the values into the other devices at any timing or by trigger intervals. 	Chapter 11 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]
Script function	Controls a more complex GOT display with creating GOT's original program (script). Controlling the GOT display with the script function drastically reduces the load on the system side (controllers) display. Example) Setting the interlock function to touch switches  When the Run/Stop key is turned on without the Ready key turned on, the Running lamp does not light. When the Ready and Run/Stop keys are turned on, the Running lamp lights. * The object script function is not available for GT11.	Chapter 16 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG]

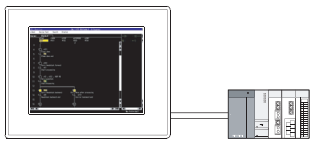
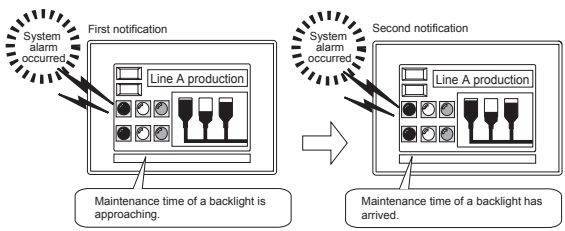
●Maintenance functions

Function	Overview	Reference
System monitor function GT16 GT15 GT Soft GOT1000	Monitors and tests devices of a programmable controller CPU and the buffer memory of an intelligent function module with a dedicated screen. Preparing a debugging screen is not required for checking devices. 	☞ Chapter 14 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG] ☞ Chapter 2 in GOT1000 Series Extended/ Option Functions Manual[SH-080544ENG]
Device monitor function GT10	For a controller connected to the GOT, forcibly turning on or off devices of the controller and changing the set value or present value are available. 	☞ Chapter 14 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG] ☞ Chapter 15 in GT10 User's Manual [JY997D24701]
MELSEC-A list editor function GT16 GT15 GT Soft GOT1000	Edits the sequence program of the ACPU in list format. Programs can be easily changed on GOT at worksites. 	☞ Chapter 14 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG] ☞ Chapter 4 in GOT1000 Series Extended/ Option Functions Manual[SH-080544ENG]

Function	Overview	Reference
MELSEC-FX list editor function GT16 GT15 GT Soft GOT1000	Edits the sequence program of the FXCPU in list format. Programs can be easily changed on GOT at worksites.  * Cannot be used for GT1030 and GT1020.	Chapter 14 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG] Chapter 5 in GOT1000 Series Extended/ Option Functions Manual[SH-080544ENG]
Ladder monitor function GT16 GT15	Monitors the sequence program of a programmable controller CPU in the ladder format with a dedicated screen. With the ladder monitor function, the cause of errors can be investigated on the GOT. 	Chapter 14 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG] Chapter 3 in GOT1000 Series Extended/ Option Functions Manual[SH-080544ENG]
Intelligent module monitor function GT16 GT15	Monitors the buffer memory of an intelligent function module and changes the data with a dedicated screen. The signal status of I/O modules can also be monitored. 	Chapter 14 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG] Chapter 6 in GOT1000 Series Extended/ Option Functions Manual[SH-080544ENG]

Function	Overview	Reference
Q motion monitor function GT16 GT15	Sets the servo monitoring and parameter of a motion controller CPU (Q series) with a dedicated screen. 	Chapter 14 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG] Chapter 8 in GOT1000 Series Extended/ Option Functions Manual[SH-080544ENG]
Servo amplifier monitor function GT16 GT15	Enables various monitor functions, parameter changes, test operations, and others for a servo amplifier with a dedicated screen. 	Chapter 14 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG] Chapter 9 in GOT1000 Series Extended/ Option Functions Manual[SH-080544ENG]
Network monitor function GT16 GT15	Monitors the network status of CC-Link IE CONTROLLER NETWORK, MELSECNET/H, MELSECNET/10, MELSECNET(Ⅱ), and MELSECNET/B with a dedicated screen. 	Chapter 14 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG] Chapter 7 in GOT1000 Series Extended/ Option Functions Manual[SH-080544ENG]

Function	Overview	Reference
CNC monitor function GT16 GT15	Monitors the position display, alarm diagnosis, tool offset parameter, program data, and others equivalent to those for the MELDAS dedicated display with a dedicated screen. 	☞ Chapter 14 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG] ☞ Chapter 10 in GOT1000 Series Extended/ Option Functions Manual[SH-080544ENG]
Backup/ restore function GT16 GT15	Saves (backs up) the setting data, including a sequence program, parameters, setting values, for a controller connected to the GOT to a memory card installed in the GOT, and restores the saved data to the controller if required. The system can be backed up/restored without a personal computer.  * The USB memory is only supported by GT16.	☞ Chapter 14 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG] ☞ Chapter 11 in GOT1000 Series Extended/ Option Functions Manual [SH-080544ENG]
CNC data I/O function GT16 GT15	Copies or deletes machining programs, parameters and others on the CNC connected to a GOT.  * The USB memory is only supported by GT16.	☞ GT Designer2 Version2 Screen Design Manual [SH-080509] Chapter 14 ☞ GOT1000 Series Extended/ Option Functions Manual [SH-080541] Chapter #

Function	Overview	Reference
SFC monitor function GT16 GT15	The GOT can monitor and display SFC programs of the PLC CPU in the SFC diagram format (MELSAP3 or MELSAP-L format) with a dedicated screen.With the SFC monitor function, investigating the causes of errors in PLC systems is available with the GOT. 	☞ Chapter 14 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) [SH-080530ENG] ☞ Chapter 13 in GOT1000 Series Extended/ Option Functions Manual [SH-080544ENG]
Maintenance report function GT16 GT15	Automatically counts the backlight energization time (number of times for holding down the touch key and writing to the built-in flash memory), the maintenance time can be indicated in two stages. 	☞ Chapter 9 in GT16 User's Manual [SH-080778ENG] ☞ Chapter 16 in GT15 User's Manual [SH-080528ENG]

4. CONNECTION CONFIGURATION

The GOT1000 series can connect to various FA devices including the MITSUBISHI programmable controller.
Select a device to be connected to the GOT.

4. CONNECTION CONFIGURATION

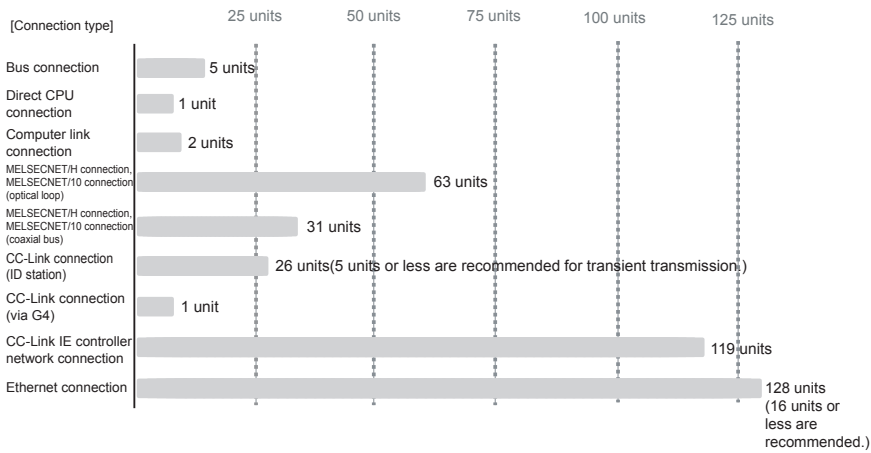
4.1 MITSUBISHI Programmable Controller

4.1.1 Connection type

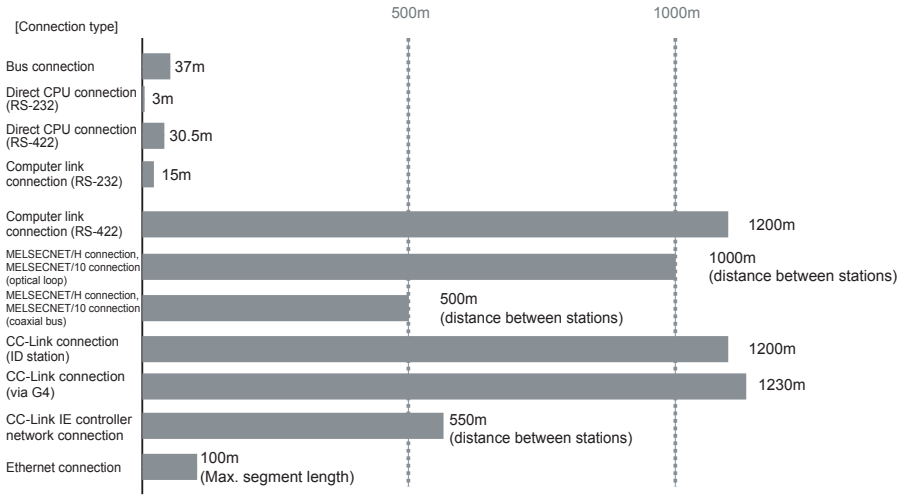
●Feature of each connection type

Connection type	Feature
Bus connection	Enables the quick response with touch switches equivalent to that with push buttons.
Direct CPU connection	Enables connecting to the MELSEC-Q/QnA/A/FX series at the lowest cost.
Computer link connection	Enables easily connecting the GOT to a programmable controller with the serial communication.
MELSECNET/H, MELSECNET/10 connections (programmable controller to programmable controller network)	Enables using multiple GOTs as remote control terminals.
CC-Link IE controller network connection	Enables sending/receiving large size data at high speed connection.
CC-Link connection (ID)	Enables connecting the GOT as an intelligent device station in a CC-Link system.
CC-Link connection (via G4)	Enables connecting the GOT to a CC-Link system via the AJ65BT-G4-S3 or AJ65BT-R2N.
Ethernet connection	Enables the remote maintenance from offices at production sites with connecting the GOT to the Ethernet system.

●Max. number of connectable GOTs for connecting to QCPU



●Max. installation distance between GOT and QCPU



●Connectable models

Series	Model	GT16/GT15/GT11 Connection type									GT SoftGOT1000 Connection type									GT10 Connection type		
		Bus connection*3	Direct CPU connection	Computer link	MELSEC NET/H*1	MELSEC NET/10*1	CC-Link IE controller network*1	CC-Link /IDT1	CC-Link (via G4)	Ethernet*1	Bus connection	Direct CPU connection	Computer link	MELSEC-NET/H	MELSEC-NET/10	CC-Link IE controller network*1	CC-Link (/ID)	CC-Link (via G4)	Ethernet	Direct CPU connection	Computer link	CC-Link (via G4)
MELSEC-Q series (Q mode)	Q00JCPU	○	○	○	○	○	○	○	○	○	×	USB connection	○	○	○	○	×	×	○	○	○	○
	Q00CPU																					
	Q01CPU																					
	Q02CPU																					
	Q02HCPU																					
	Q06HCPU										○ *2											
	Q12HCPU																					
	Q25HCPU																					
	Q02PHCPU											○										
	Q06PHCPU																					
	Q12PHCPU																					
	Q25PHCPU																			×	×	×
Redundant system (main base unit)	Q12PRHCPU	×	○	×	○	○	○	○	○	○	×		×	○	○	○	×	×	○			
	Q25PRHCPU																					
Redundant system (extension base unit)	Q12PRHCPU	×	×	○	×	×	×	○	○	○	×	×	×	○	×	×	×	×	○			
	Q25PRHCPU																					
MELSEC-Q series (Q mode)	Q02UCPU	○	○	○	○	○	○	○	○	○	×	○	○	○	○	○	×	×	○	○	○	○
	Q03UDCPU																					
	Q04UDHCPU																					
	Q06UDHCPU																					
	Q13UDHCPU																					
	Q26UDHCPU																					
	Q03UDECPU	○	×	○	○	○	○	○	○	○	×	○	×	○	○	○	×	×	○	×		
	Q04UDEHCPU																					
	Q06UDEHCPU																					
	Q13UDEHCPU																					
	Q26UDEHCPU																					
MELSECNET/H remote I/O station	QJ72LP25-25	×	○	○	×	×	×	×	×	○	×	×	○	×	×	×	×	×	×	×	×	×
	QJ72LP25G																					
	QJ72BR15																					
MELSEC-QS series	QS001CPU	×	×	×	○	○	○	×	×	○	×	○	×	×	○	○	○	×	×	○	×	×	×
MELSEC-Q series (A mode)	Q02CPU-A	×	○	○	×	○	×	○	×	○	×	×		○	×	○	×	×	○	○	○	
	Q02HCPU-A																					
	Q06HCPU-A																					
MELSEC-QnA series (QnACPU type)	Q2ACPU	○	○	○	×	○	×	○	×	○	×	○		○	×	○	×	×	○	○	○	
	Q2ACPU-S1																					
	Q3ACPU																					
	Q4ACPU																			×	×	
	Q4ARCPU																					
MELSEC-QnA series (QnASCPU type)	Q2ASCPU																					
	Q2ASCPU-S1																			○	○	
	Q2ASHCPU																					
	Q2ASHCPU-S1																					
MELSEC-A series (AnCPU type)	A2UCPU	○	○	○	×	○	×	○	×	○	×	○		○	×	○	×	×	○	○	○	×
	A2UCPU-S1																					
	A3UCPU																					
	A4UCPU																					
	A2ACPU																					
	A2ACPUP21																					
	A2ACPUR21																					
	A2ACPU-S1																					
	A2ACPUP21-S1																					
	A2ACPUR21-S1																					
	A3ACPU																					
	A3ACPUP21																					
	A3ACPUR21																					
	A1NCPU																					
	A1NCPUP21																					
	A1NCPUR21																					
	A2NCPU																					
	A2NCPUP21																					
	A2NCPUR21																					
	A2NCPU-S1																					
	A2NCPUP21-S1																					
	A2NCPUR21-S1																					
	A3NCPU																					
	A3NCPUP21																					
	A3NCPUR21																					

*1: Available only for GT15.
*2: Available only when GT SoftGOT1000 is installed on the PC CPU module.
*3: Available only for GT15, GT115□-Q□BDQ, and GT115□-Q□BDA.

●Connectable models

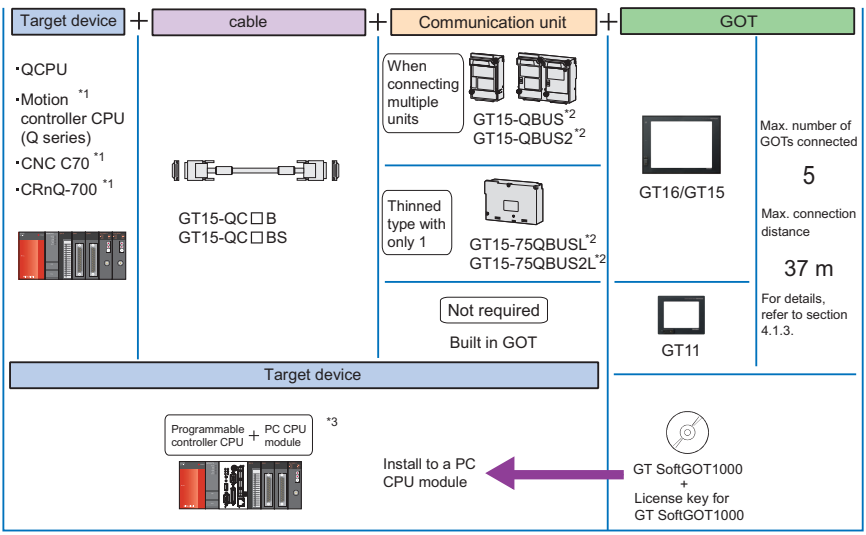
Series	Model	GT16/GT15/GT11 Connection type									GT SoftGOT1000 Connection type									GT10 Connection type		
		Bus connection*3	Direct CPU connection	Computer link	MELSEC NET/H *1	MELSEC NET/10 *1	CC-Link IE controller network *1	CC-Link (ID) *1	CC-Link (via G4)	Ethernet *1	Bus connection	Direct CPU connection	Computer link	MELSEC NET/H	MELSEC NET/10	CC-Link IE controller network *1	CC-Link (ID)	CC-Link (via G4)	Ethernet	Direct CPU connection	Computer link	CC-Link (via G4)
MELSEC-A series (AnSCPU type)	A2USCPU	○	○	○	×	○	×	○	×	○	×	○	○	×	×	×	×	×	○	○	○	×
	A2USCPU-S1																					
	A2USHCPU-S1																					
	A1SCPU					×																
	A1SCPUC24-R2																					
	A1SHCPU																					
	A2SCPU																					
	A2SCPU-S1																					
	A2SHCPU																					
	A2SHCPU-S1																					
	A1SJCPU																					
	A1SJCPU-S3																					
	A1SJHCPU																					
MELSEC-A series	A0J2HCPU																					
	A0J2HCPUP21	○	○	○		×		○	×	○			○	×	×		×	×	○			
	A0J2HCPUR21																					
	A0J2HCPU-DC24																					
	A2CCPU		○																			
	A2CCPUP21	×	○	×	×	×	×	×	×	×	×	○	×	×	×	×	×	×	×	○	×	
	A2CCPUR21		○																			
	A2CCPUC24																					
	A2CCPUC24-PRF	×	○	○		×		×	×	×			○	×	×		×	×	×			
	A2CJCPU-S3	×	○	×		×		×	×	×			×	×	×		×	×	×			
	A1FXCPU	×	○	×		×		×	×	×			×	×	×		×	×	×			
Motion controller CPU (Q series)	Q172CPU	○	○	○	○	○	×	○	○	○	×	×	×	×	×	×	×	×	×	×	×	×
	Q173CPU																					
	Q172CPUN																					
	Q173CPUN																					
	Q172HCPU																					
	Q173HCPU																					
	Q172DCPU	○	○	○	○	○	○	○	○	○	×	×	×	×	×	×	×	×	×	×	×	×
	Q173DCPU																					
Motion controller CPU (A series) (Large-sized type)	A273UCPU	○	○	○	×	○	×	○	×	○	×	×	×	×	×	×	×	×	×	×	×	×
	A273UHCPU											○	○	×	○				○			
	A273UHCPU-S3																					
	A373UCPU											×	×		×				×			
	A373UCPU-S3																					
Motion controller CPU (A series) (Small-sized type)	A171SCPU	○	○	○	×	×	×	○	×	○	×	×	×	×	×	×	×	×	×	×	×	
	A171SCPU-S3																					
	A171SCPU-S3N																					
	A171SHCPU											○	○		○				○			
	A171SHCPUN																					
	A172SHCPU																					
	A172SHCPUN																					
	A173UHCPU					○																
	A173UHCPU-S1																					
MELSEC-FX series	FX0S	×	○	×	×	×	×	×	×	×	×	○	×	×	×	×	×	×	×	○	×	
	FX0N																					
	FX1S																					
	FX1N																					
	FX1NC																					
	FX2N																					
	FX2NC																					
	FX3G																					
	FX3U																					
	FX3UC																					
CNC C70	Q173NCCPU	○	○	○	○	○	○	○	○	○	×	○	○	○	○	○	×	×	○	×	×	×
Robot controller	CRnQ-700	○	○	○	○	○	○	○	○	○	×	○	○	○	○	○	×	×	○	×	×	×
	CRnD-700	×	×	×	×	×	×	×	×	○	×	×	×	×	×	×	×	×	○	×	×	×

The GOT model to be used differs depending on the connection type.

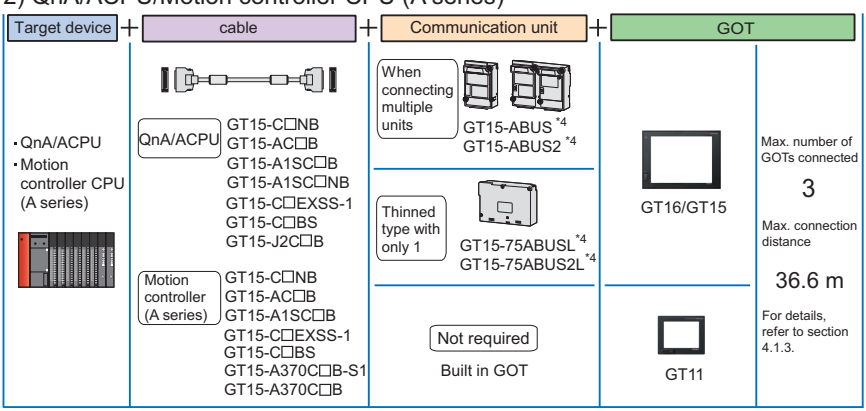
Series		Connection type	GOT model to be used
GT11		RS-232 or RS-422 connections	GT115□-Q□BD
		Bus connection	GT115□-Q□BDQ, GT115□-Q□BDA
	Handy GOT	RS-232 or RS-422 connections	GT115□HS-Q□BD
GT10	GT105□	RS-232 or RS-422 connections	GT105□-Q□BD
	GT1030 GT1020	RS-232 connection	GT1030-LBD2/GT1030-LBDW2, GT1020-LBD2/GT1020-LBDW2
		RS-422 connection	GT1030-LBD/GT1030-LBDW, GT1020-LBD/GT1020-LBDW, GT1020-LBL/GT1020-LBLW (For GT1020-LBL/GT1020-LBLW, MELSEC-FXCPU connection is available only.)

System configuration

1) QCPU (Q mode)/Motion controller CPU (Q series)/CNC C70/Robot controller



2) QnA/ACPU/Motion controller CPU (A series)



*1: Configure the multiple CPU system.

*2: Use the GT15-QBUS(2) for mounting the following units. GT15-75QBUS(2)L is not available.
Units for the multimedia function, printer function, Video/RGB display, RGB output, function to use CF card unit/CF card extension unit, Ethernet download, gateway function, and MES interface function
For GT16, however, Ethernet download, gateway function, and MES interface function are available using the Ethernet interface.

*3: Connect the PC CPU module to a programmable controller CPU on the same main base unit.

*4: Use the GT15-ABUS(2) for mounting the following units. GT15-75ABUS(2)L is not available.
Units for the multimedia function, printer function, Video/RGB display, RGB output, function to use CF card unit/CF card extension unit, Ethernet download, gateway function, and MES interface function
For GT16, however, Ethernet download, gateway function, and MES interface function are available using the Ethernet interface.

The GOT model to be used differs depending on the connection type.

Series		Connection type	GOT model to be used
GT11		RS-232 or RS-422 connections	GT115□-Q□BD
		Bus connection	GT115□-Q□BDQ, GT115□-Q□BDA
	Handy GOT	RS-232 or RS-422 connections	GT115□HS-Q□BD

Precautions

Other precautions

- For the cable configuration of GT15-C□EXSS-1, refer to "External Dimensions" in section 1.5.
- Use the GT15-QBUS(2) or GT15-ABUS(2) for mounting units for the multimedia function, printer function, Video/RGB display, RGB output, Ethernet download, gateway function, and MES interface function, CF card unit, and CF card extension unit.
  The GT15-75QBUS(2)L and GT15-75ABUS(2)L are not available.
  For GT16, however, Ethernet download, gateway function, and MES interface function are available using the Ethernet interface.
- When connecting multiple GOTs, the GOT1000 series, GOT-A900 series, GOT800 series and A77GOT cannot be connected together.
- For connecting the GOT to the multiple CPU system (Q00CPU, Q01CPU, Q02CPU, Q02HCPU, Q06HCPU, Q12HCPU, and Q25HCPU), use CPUs with the function version B or later.
- When connecting to Q00JCPU of MELSEC-Q series (Q mode)
  When using the bus extension connector box, mount it on the extension base unit. (The bus extension connector box cannot be mounted on the main base unit.)
- When connecting to Q4ARCPU of MELSEC-QnA series (QnACPU type)
  For the redundant Q4ARCPU system, connect the GOT to redundant extension base unit A68RB (version B or later) at the last stage via the bus connection.
- When connecting to A1SJCPU, A1SJCPU-S3, and A1SJHCPU of MELSEC-A series (AnSCPU type)
  When using the extension base unit, the bus connection is disabled.
- When connecting to motion controller CPU (Q series)
  - For Q172CPU or Q173CPU
    Use the motion controller CPU with the following production numbers.
    Q172CPU with K******* or later, Q173CPU with J******* or later
  - For Q172 or Q173CPU
    For using the SV13, SV22, and SV43, use a motion controller with the following OS installed.
    SW6RN-SV13Q□: 00E or later, SW6RN-SV22Q□: 00E or later, SW6RN-SV43Q□: 00B or later
  - For Q172CPUN or Q173CPUN
    For using the SV13, SV22, and SV43, use a motion controller with the following OS installed.
    SW6RN-SV13Q□: 00H or later, SW6RN-SV22Q□: 00H or later, SW6RN-SV43Q□: 00B or later
- When connecting to motion controller CPU (A series) (small-sized type)
  When using the extension base unit, use the A168B.
- For other precautions for the bus connection, refer to "Details of bus connection" in section 4.1.3.

Related Manuals

- For details of system configuration and connection cable
- For precautions and restrictions
- For outlined procedure and checking of bus connection

➤ Chapter 2 in GOT1000 Series Connection Manual (SH-080532ENG)

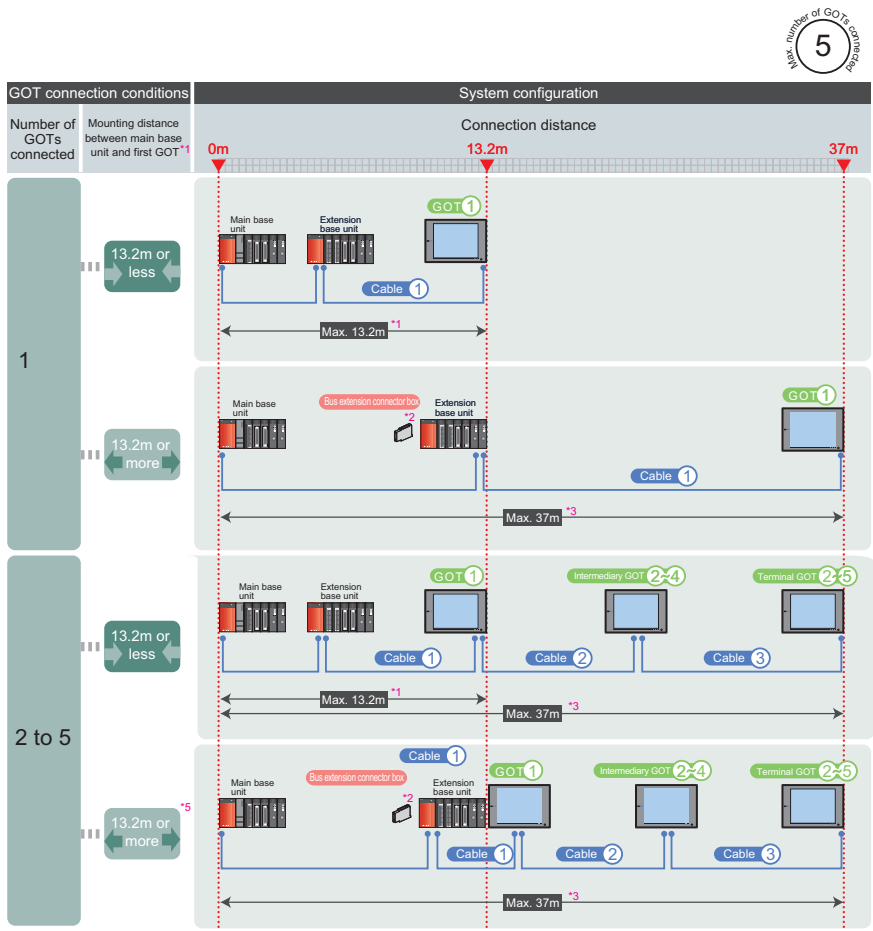
- For controllers that can be monitored by GOT and accessible range

➤ Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)

* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

4.1.3 Details of bus connection

●When connecting to QCPU (Q mode)/motion controller CPU (Q series)



*1: When the extension base unit is used, the extension cable length (between the base units) is included.
For the cable between the main base unit and extension base unit, refer to Mitsubishi Programmable Logic Controller MELSEC-Q (Catalog) (L(NA)-08033E).

*2: When the first GOT is installed 13.2m or more away from the main base unit, the bus extension connector box is required.
Without the extension base unit : Mount the bus extension connector box to the main base unit.
With the extension base unit : Mount the bus extension connector box to the last stage of the extension base unit.
(The bus extension connector box cannot be mounted to the main base unit when a GOT is connected to Q00JCPU.Mount the bus extension connector box to the extension base unit.)

*3: Select a cable to keep the total cable length between the main base unit of a programmable controller and a terminal GOT within 37m.

*4: Indication of cable model (example) "GT15-QC□B 06:0.6m"→GT15-QC06B

*5: There are the following restrictions depending on the total cable length when three or more GOTs are connected.
Use the same power supplies of a programmable controller and all GOTs and turn on or off all the power supplies simultaneously.

○: Unrestricted △: Restricted

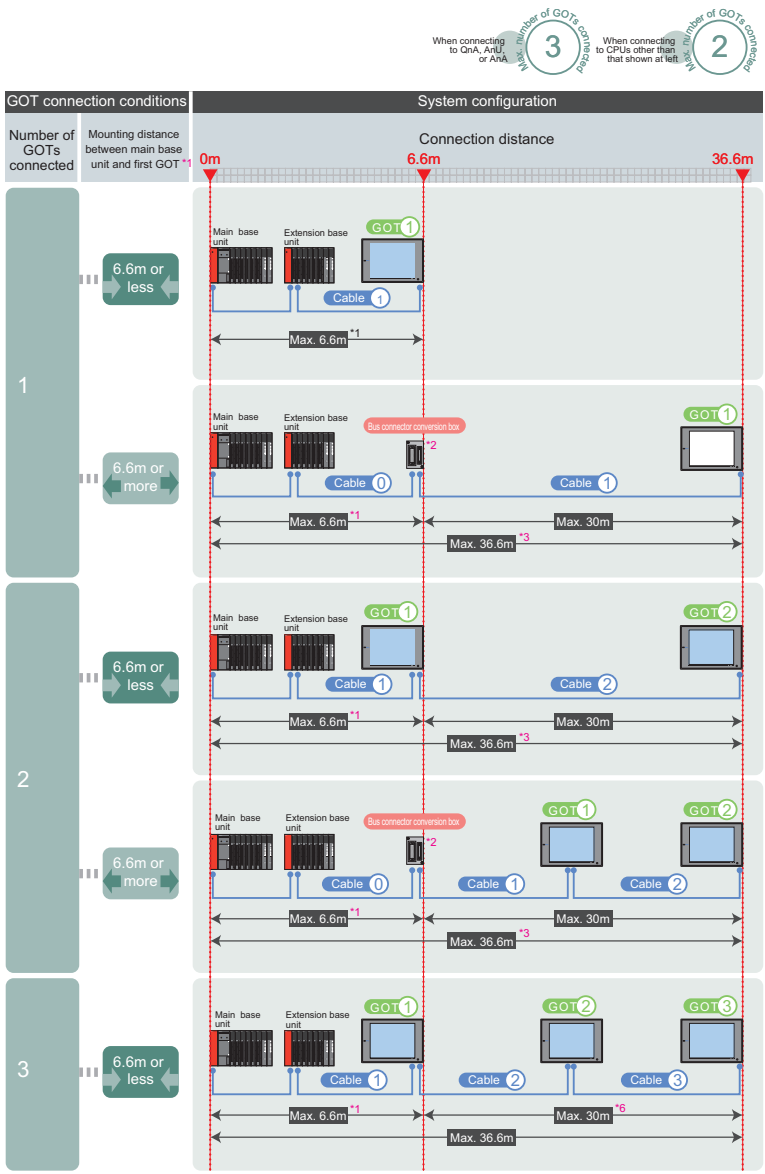
Number of GOTs connected	Total cable length			
	15m or less	20m or less	25m or less	37m or less
2 or less	○	○	○	○
3	○	○	○	△
4	○	○	△	△
5	○	△	△	△

*6: Use the GT15-QBUS(2) for mounting the following units. GT15-75QBUS(2)L is not available.
Units for the multimedia function, Video/RGB display, RGB output, printer output, Ethernet download, gateway function, MES interface function, CF card unit, and CF card extension unit
For GT16, however, Ethernet download, gateway function, and MES interface function are available using the Ethernet interface.

*7: The bus connection unit is not required for GT115□ (dedicated to the bus connection).

		GOT main unit	Bus connection unit *6		GOT main unit	Bus connection unit *5		GOT main unit	Bus connection unit *6
	GT15-QC□B 06 : 0.6m 12 : 1.2m 30 : 3m 50 : 5m 100: 10m	15" GT1695 15" GT1595 12.1" GT1685 12.1" GT1585 10.4" GT157□ 8.4" GT156□ 5.7" GT155□ 5.7" GT115□*7 (dedicated to bus connection)	GT15-75QBUSL GT15-75QBUS2L GT15-QBUS GT15-QBUS2						
A9GT-QCNB	GT15-QC□B 06 : 0.6m 12 : 1.2m 30 : 3m 50 : 5m 100: 10m GT15-QC□BS 150 : 15m 200 : 20m 250 : 25m 300 : 30m 350 : 35m	15" GT1695 15" GT1595 12.1" GT1685 12.1" GT1585 10.4" GT157□ 8.4" GT156□ 5.7" GT155□ 5.7" GT115□*7 (dedicated to bus connection)	GT15-75QBUSL GT15-75QBUS2L GT15-QBUS GT15-QBUS2						
	GT15-QC□B 06 : 0.6m 12 : 1.2m 30 : 3m 50 : 5m 100: 10m	15" GT1695 15" GT1595 12.1" GT1685 12.1" GT1585 10.4" GT157□ 8.4" GT156□ 5.7" GT155□	GT15-75QBUS2L GT15-QBUS2	GT15-QC□B 06 : 0.6m 12 : 1.2m 30 : 3m 50 : 5m 100: 10m GT15-QC□BS 150 : 15m 200 : 20m 250 : 25m 300 : 30m 350 : 35m	15" GT1695 15" GT1595 12.1" GT1685 12.1" GT1585 10.4" GT157□ 8.4" GT156□ 5.7" GT155□	GT15-75QBUS2L GT15-QBUS2	GT15-QC□B 06 : 0.6m 12 : 1.2m 30 : 3m 50 : 5m 100: 10m GT15-QC□BS 150 : 15m 200 : 20m 250 : 25m 300 : 30m 350 : 35m	15" GT1695 15" GT1595 12.1" GT1685 12.1" GT1585 10.4" GT157□ 8.4" GT156□ 5.7" GT155□ 5.7" GT115□*7 (dedicated to bus connection)	GT15-75QBUSL GT15-75QBUS2L GT15-QBUS GT15-QBUS2
A9GT-QCNB	GT15-QC□B 06 : 0.6m 12 : 1.2m 30 : 3m 50 : 5m 100: 10m GT15-QC□BS 150 : 15m 200 : 20m 250 : 25m 300 : 30m 350 : 35m	15" GT1695 15" GT1595 12.1" GT1685 12.1" GT1585 10.4" GT157□ 8.4" GT156□ 5.7" GT155□	GT15-75QBUS2L GT15-QBUS2	GT15-QC□B 06 : 0.6m 12 : 1.2m 30 : 3m 50 : 5m 100: 10m GT15-QC□BS 150 : 15m 200 : 20m	15" GT1695 15" GT1595 12.1" GT1685 12.1" GT1585 10.4" GT157□ 8.4" GT156□ 5.7" GT155□	GT15-75QBUS2L GT15-QBUS2	GT15-QC□B 06 : 0.6m 12 : 1.2m 30 : 3m 50 : 5m 100: 10m GT15-QC□BS 150 : 15m 200 : 20m	15" GT1695 15" GT1595 12.1" GT1685 12.1" GT1585 10.4" GT157□ 8.4" GT156□ 5.7" GT155□ 5.7" GT115□*7 (dedicated to bus connection)	GT15-75QBUSL GT15-75QBUS2L GT15-QBUS GT15-QBUS2

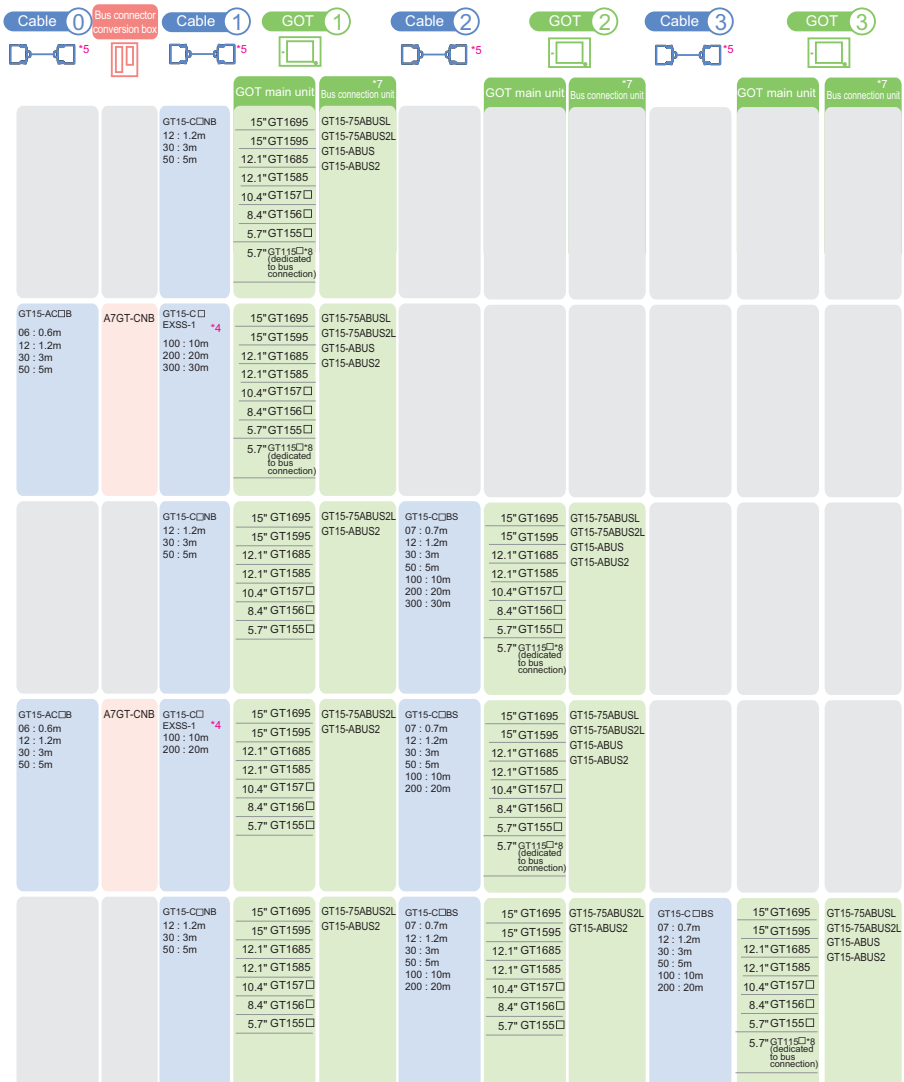
●When connecting to QnACPU type or AnCPU type



*1: When the extension base unit is used, the extension cable length (between the base units) is included.
For the cable between the main base unit and extension base unit, refer to Mitsubishi Programmable Logic Controller MELSEC-Q (Catalog) (L(NA)-08033E).

*2: When the first GOT is installed 6.6m or more away from the main base unit, the bus connector conversion box is required.

*3: Select a cable to keep the total cable length between the main base unit of a programmable controller and a terminal GOT within 36.6m.



*4: For GT15-C□EXSS-1
- Consisting of GT15-EXCNB (0.5m) and GT15-C□BS (10 to 30m).
- When calculating the cable length, use GT15-C100EXSS-1 (10m), GT15-C200EXSS-1 (20m), and GT15-C300EXSS-1 (30m).
- Connect connectors as shown below.
  Connector "COM1" → Programmable controller
  Connector "COM2" → GOT

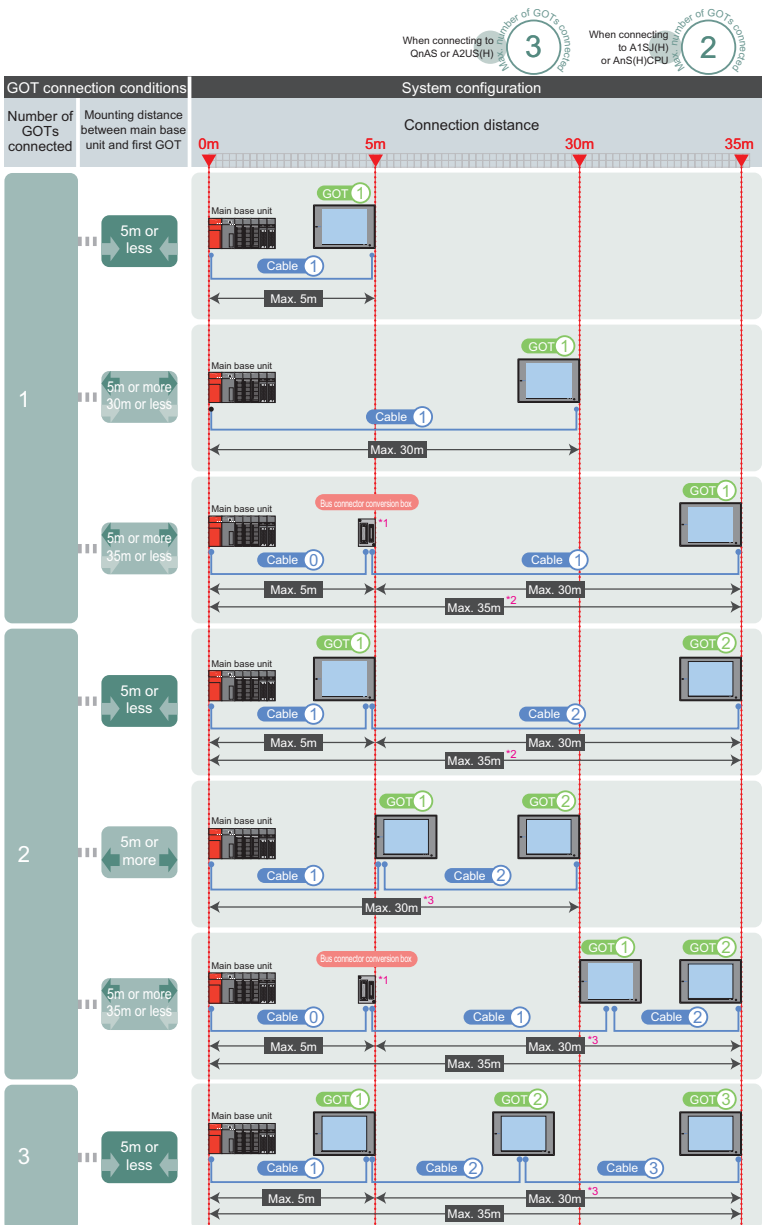
*5: Indication of cable model (example) "GT15-AC□B
06:0.6m" → GT15-AC06B

*6: Select a cable to keep the total cable length within 30m.

*7: Use the GT15-ABUS(2) for mounting the following units. GT15-75ABUS(2)L is not available.
Units for the multimedia function, Video/RGB display, RGB output, printer output, Ethernet download, gateway function, MES interface function, CF card unit, and CF card extension unit
For GT16, however, Ethernet download, gateway function, and MES interface function are available using the Ethernet interface.

*8: The bus connection unit is not required for GT115□(dedicated to the bus connection).

●When connecting to QnASCPU type or AnSCPU type without the extension base unit



*1: When installing the 1st GOT 30m or more away from the main base unit, the bus connector conversion box is required.
*2: Select a cable to keep the total cable length between the main base unit of a programmable controller and a terminal GOT within 35m.
*3: Select a cable to keep the total cable length within 30m.

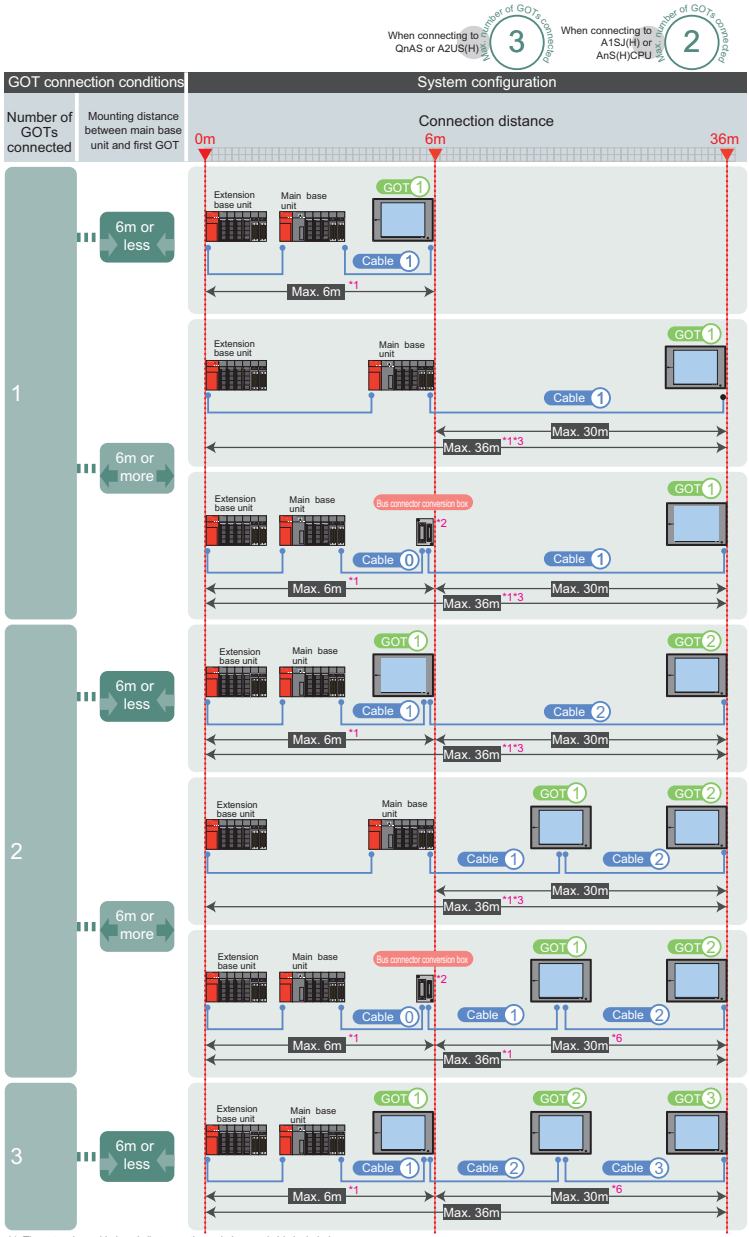
*4: For GT15-C□EXSS-1
・Consisting of GT15-EXCNB (0.5m) and GT15-C□BS (10 to 30m).
・When calculating the cable length, use GT15-C100EXSS-1 (10m), GT15-C200EXSS-1 (20m), and GT15-C300EXSS-1 (30m).

*5: Indication of cable model (example) "GT15-A1SC□NB 05:0.45m"→GT15-A1SC05NB

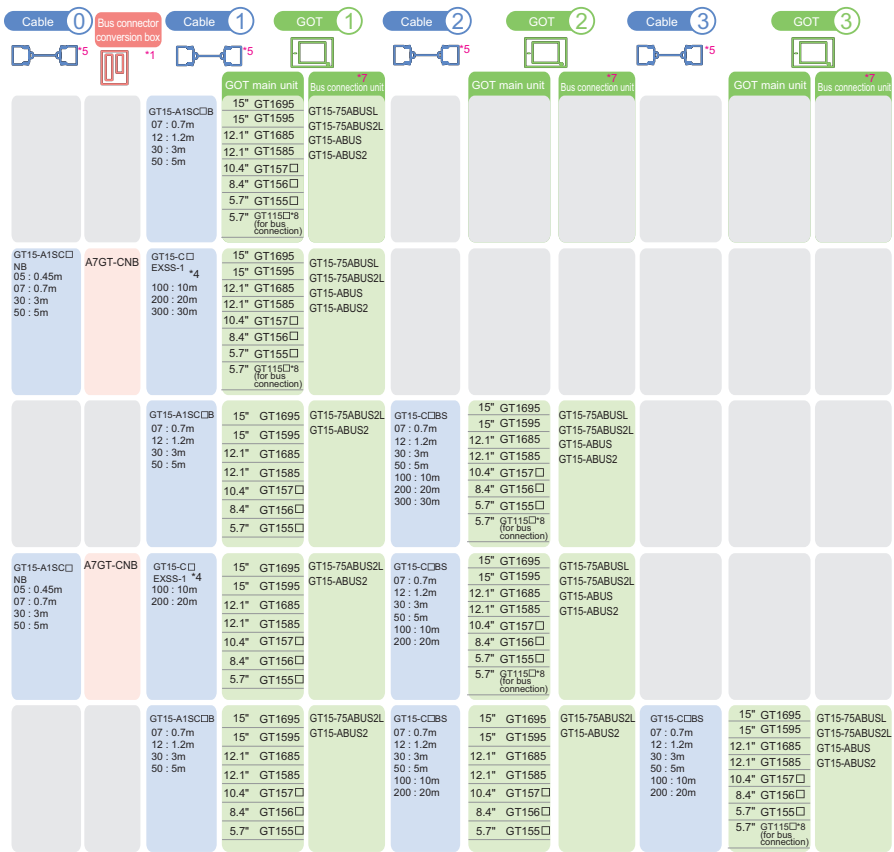
*6: Use the GT15-ABUS(2) for mounting the following units. GT15-75ABUS(2)L is not available.
Units for the multimedia function, Video/RGB display, RGB output, printer output, Ethernet download, gateway function, MES interface function, CF card unit, and CF card extension unit
For GT16, however, Ethernet download, gateway function, and MES interface function are available using the Ethernet interface.

*7: The bus connection unit is not required for GT115□ (dedicated to the bus connection).

●When connecting to QnASCPU type or AnSCPU type with the extension base unit



*1: The extension cable length (between the main base units) is included.
For the cable between the main base unit and extension base unit, refer to Mitsubishi Programmable Logic Controller MELSEC-Q (Catalog) (L(NA)-08033E)
*2: When installing the 1st GOT 30m or more away from the main base unit, the bus connector conversion box is required.
*3: Select a cable to keep the total cable length between the main base unit of a programmable controller and a terminal GOT within 36m.



*4: For GT15-C□EXSS-1
- Consisting of GT15-EXCNB (0.5m) and GT15-C□BS (10 to 30m).
- When calculating the cable length, use GT15-C100EXSS-1 (10m), GT15-C200EXSS-1 (20m), and GT15-C300EXSS-1 (30m).

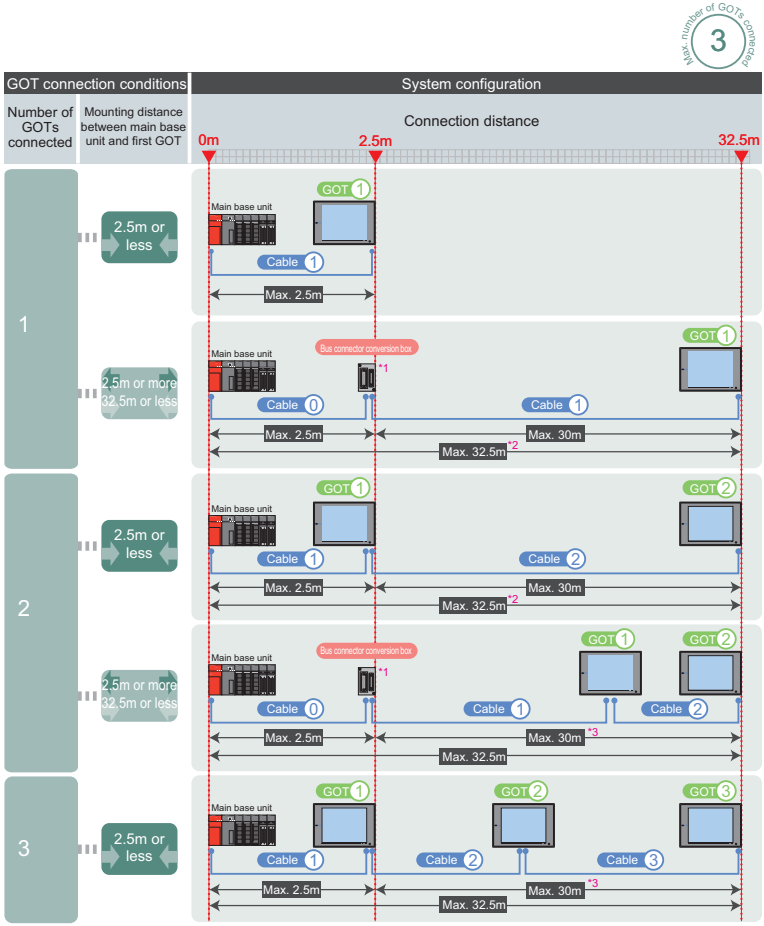
*5: Indication of cable model (example) "GT15-A1SC□NB 05:0.45m"→GT15-A1SC05NB

*6: Select a cable to keep the total cable length within 30m.

*7: Use the GT15-ABUS(2) for mounting the following units. GT15-75ABUS(2)L is not available. Units for the multimedia function, Video/RGB display, RGB output, printer output, Ethernet download, gateway function, MES interface function, CF card unit, and CF card extension unit For GT16, however, Ethernet download, gateway function, and MES interface function are available using the Ethernet interface.

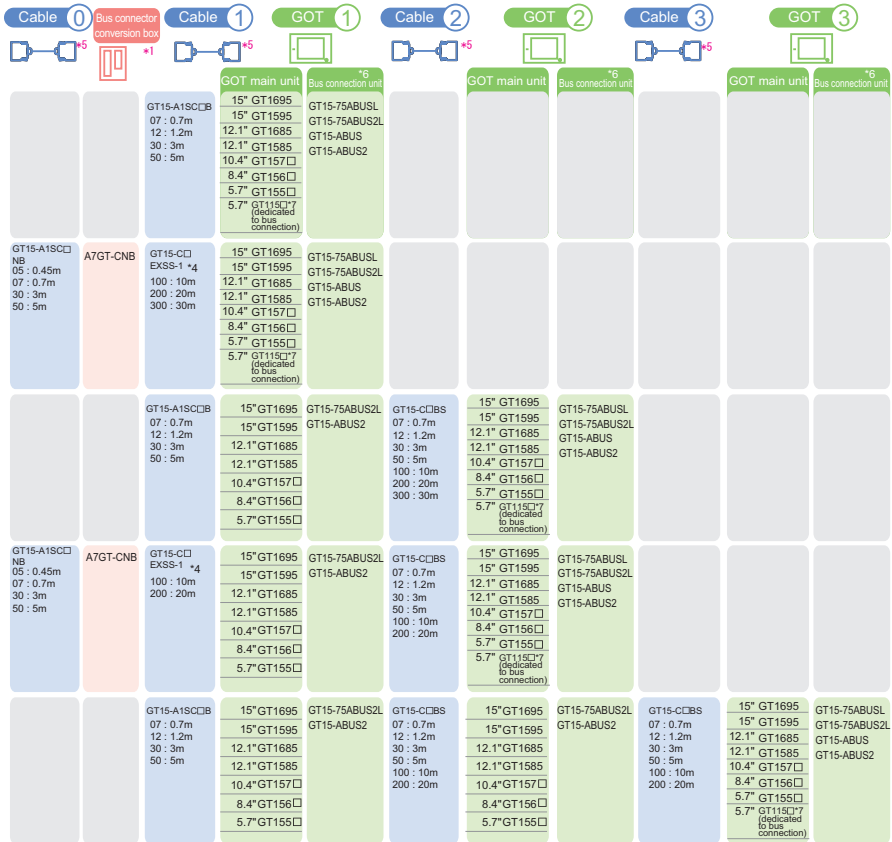
*8: The bus connection unit is not required for GT115□(dedicated to the bus connection).

●When connecting to motion controller CPU (A273UCPU, A273UHCPU(-S3)), A373UCPU(-S3)) without the extension base unit



*1: When installing the 1st GOT 30m or more away from the main base unit, the bus connector conversion box is required.
*2: Select a cable to keep the total cable length between the main base unit of a programmable controller and a terminal GOT within 32.5m.
*3: Select a cable to keep the total cable length within 30m.

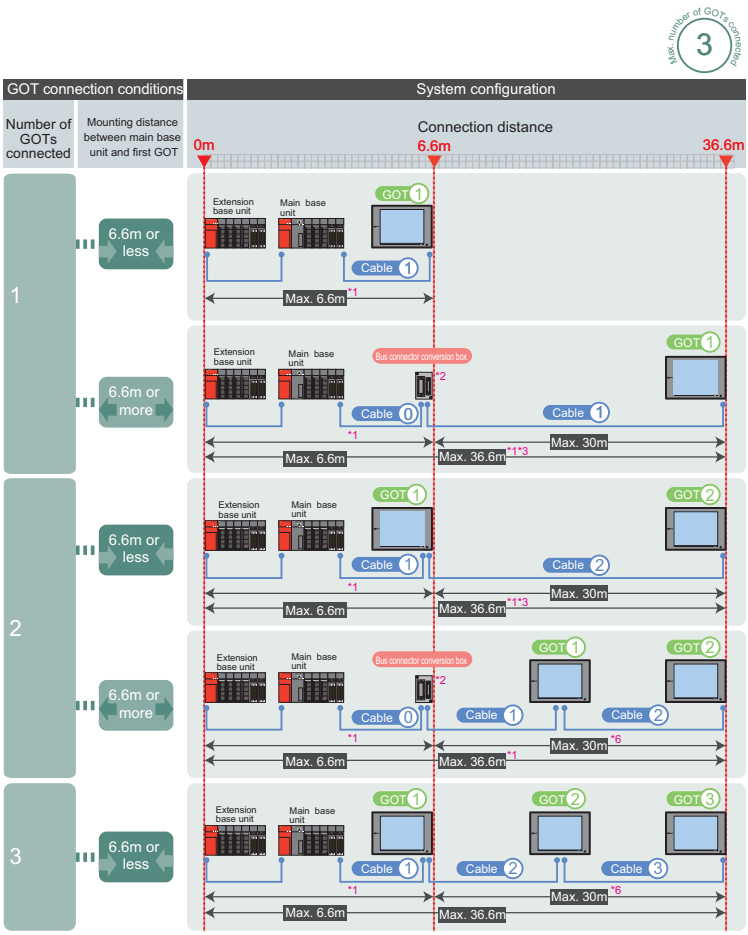
*4: For GT15-C□EXSS-1
・Consisting of GT15-EXCNB (0.5m) and GT15-C□BS (10 to 30m).
・When calculating the cable length, use GT15-C100EXSS-1 (10m), GT15-C200EXSS-1 (20m), and GT15-C300EXSS-1 (30m).



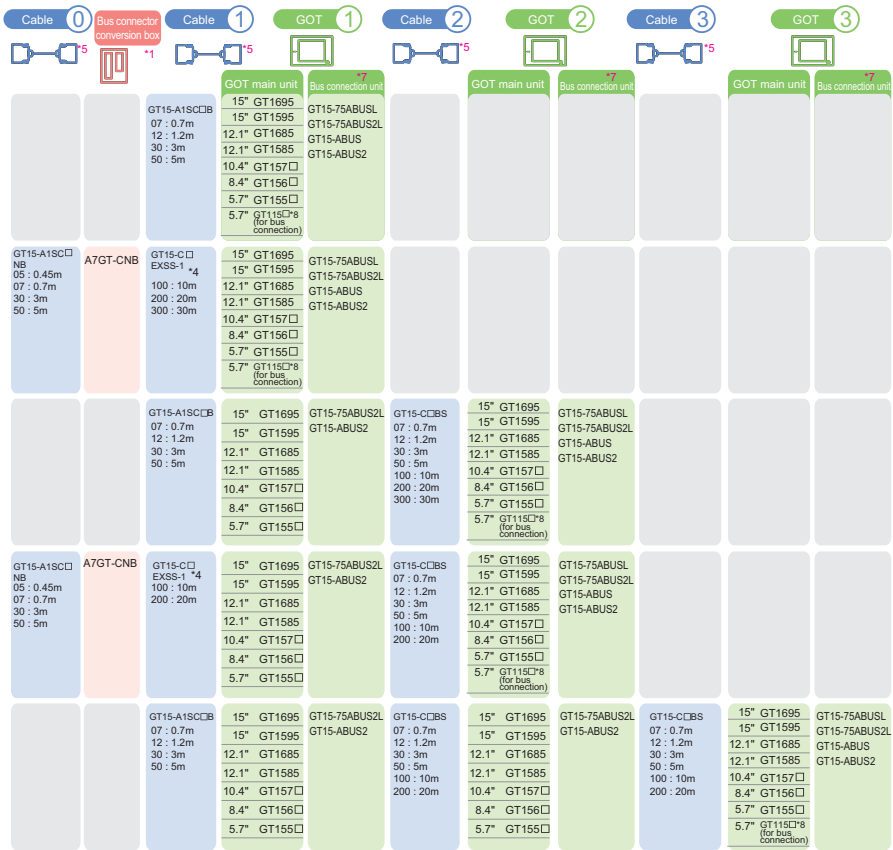
*5: Indication of cable model (example) *GT15-A1SC□NB 05: 0.45m↔ GT15-A1SC05NB
*6: Use the GT15-ABUS(2) for mounting the following units. GT15-75ABUS(2)L is not available.
Units for the multimedia function, Video/RGB display, RGB output, printer output, Ethernet download, gateway function, MES interface function, CF card unit, and CF card extension unit
For GT16, however, Ethernet download, gateway function, and MES interface function are available using the Ethernet interface.

*7: The bus connection unit is not required for GT115□ (dedicated to the bus connection).

●When connecting to motion controller CPU (A273UCPU, A273UHCPU(-S3)), A373UCPU(-S3)) with the extension base unit



*1: The extension cable length (between the main base units) is included.
For the cable between the main base unit and extension base unit, refer to Mitsubishi Programmable Logic Controller MELSEC-Q (Catalog) (L(NA)-08033E)
*2: When installing the 1st GOT 30m or more away from the main base unit, the bus connector conversion box is required.
*3: Select a cable to keep the total cable length between the main base unit of a programmable controller and a terminal GOT within 36m.



*4: For GT15-C□EXSS-1
- Consisting of GT15-EXCNB (0.5m) and GT15-C□BS (10 to 30m).
- When calculating the cable length, use GT15-C100EXSS-1 (10m), GT15-C200EXSS-1 (20m), and GT15-C300EXSS-1 (30m).

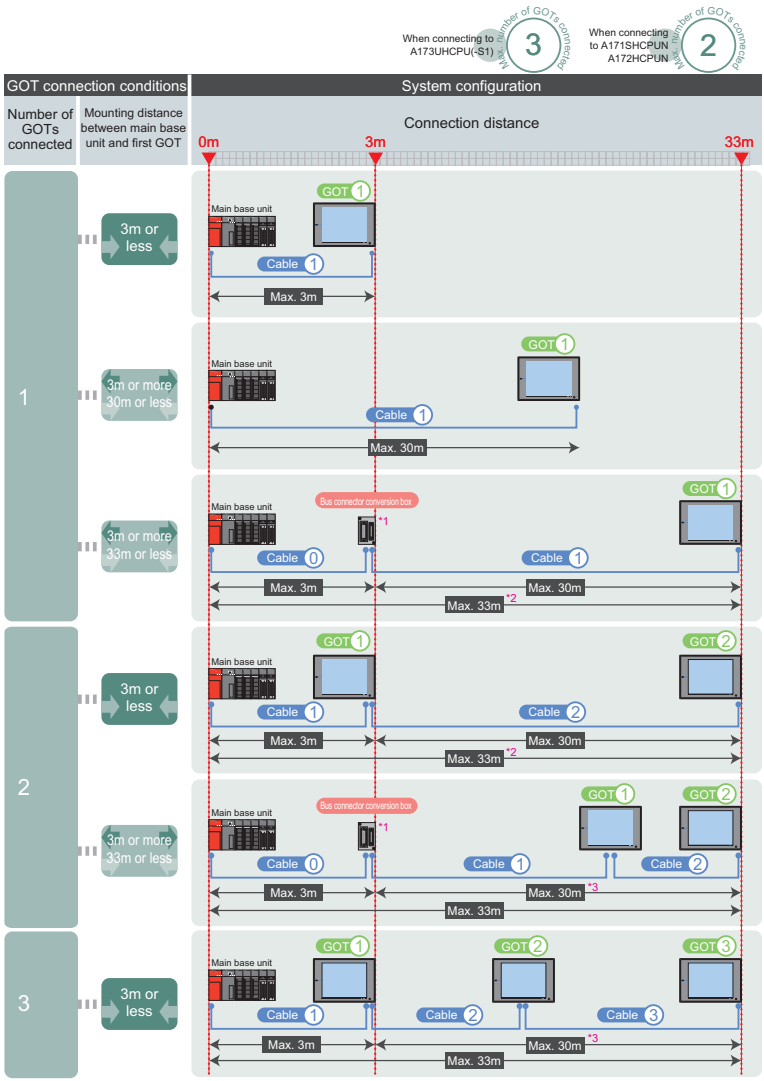
*5: Indication of cable model (example) "GT15-A1SC□NB 05:0.45m"→GT15-A1SC05NB

*6: Select a cable to keep the total cable length within 30m.

*7: Use the GT15-ABUS(2) for mounting the following units. GT15-75ABUS(2)L is not available. Units for the multimedia function, Video/RGB display, RGB output, printer output, Ethernet download, gateway function, MES interface function, CF card unit, and CF card extension unit For GT16, however, Ethernet download, gateway function, and MES interface function are available using the Ethernet interface.

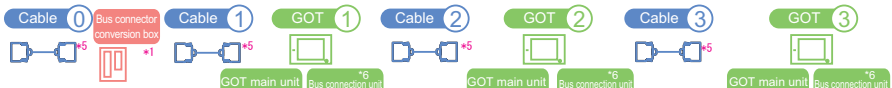
*8: The bus connection unit is not required for GT115□(dedicated to the bus connection).

●When connecting to motion controller CPU (A171SHCPUN, A172HCPUN, A173UHCPU(-S1)) without the extension base unit



*1: When installing the 1st GOT 30m or more away from the main base unit, the bus connector conversion box is required.
*2: Select a cable to keep the total cable length between the main base unit of a programmable controller and a terminal GOT within 36m.
*3: Select a cable to keep the total cable length within 30m.

*4: For GT15-C□EXSS-1
・Consisting of GT15-EXCNB (0.5m) and GT15-C□BS (10 to 30m).
・When calculating the cable length, use GT15-C100EXSS-1 (10m), GT15-C200EXSS-1 (20m), and GT15-C300EXSS-1 (30m).



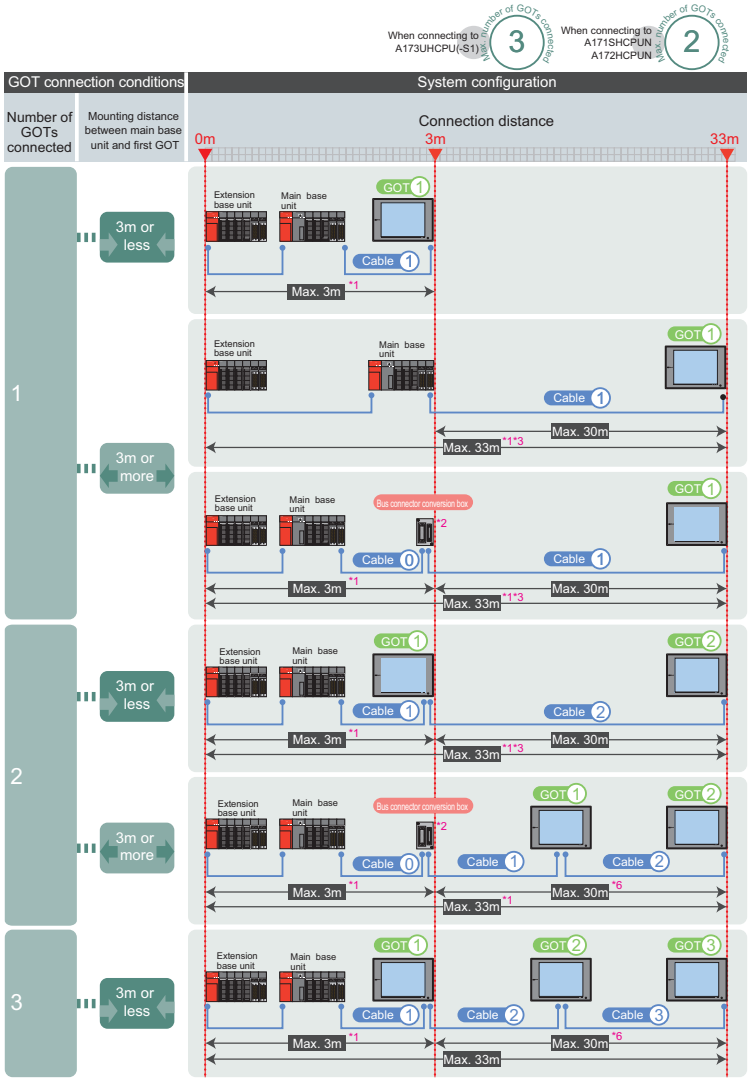
			GOT main unit	*6 Bus connection unit		GOT main unit	*6 Bus connection unit		GOT main unit	*6 Bus connection unit
		GT15-A1SC□B 07 : 0.7m 12 : 1.2m 30 : 3m 50 : 5m	15" GT1695 15" GT1595 12.1" GT1685 12.1" GT1585 10.4" GT157□ 8.4" GT156□ 5.7" GT155□ 5.7" GT115□*7 (dedicated to bus connection)	GT15-75ABUSL GT15-75ABUS2L GT15-ABUS GT15-ABUS2						
		GT15-C□ EXSS-1 *4 100 : 10m 200 : 20m 300 : 30m	15" GT1695 15" GT1595 12.1" GT1685 12.1" GT1585 10.4" GT157□ 8.4" GT156□ 5.7" GT155□ 5.7" GT115□*7 (dedicated to bus connection)	GT15-75ABUSL GT15-75ABUS2L GT15-ABUS GT15-ABUS2						
GT15-A1SC□NB 05 : 0.45m 07 : 0.7m 30 : 3m 50 : 5m	A7GT-CNB	GT15-C□ EXSS-1 *4 100 : 10m 200 : 20m 300 : 30m	15" GT1695 15" GT1595 12.1" GT1685 12.1" GT1585 10.4" GT157□ 8.4" GT156□ 5.7" GT155□ 5.7" GT115□*7 (dedicated to bus connection)	GT15-75ABUSL GT15-75ABUS2L GT15-ABUS GT15-ABUS2						
		GT15-A1SC□B 07 : 0.7m 12 : 1.2m 30 : 3m 50 : 5m	15"GT1695 15"GT1595 12.1"GT1685 12.1"GT1585 10.4"GT157□ 8.4"GT156□ 5.7"GT155□	GT15-75ABUS2L GT15-ABUS2	GT15-C□BS 07 : 0.7m 12 : 1.2m 30 : 3m 50 : 5m 100 : 10m 200 : 20m 300 : 30m	15" GT1695 15" GT1595 12.1" GT1685 12.1" GT1585 10.4" GT157□ 8.4" GT156□ 5.7" GT155□ 5.7" GT115□*7 (dedicated to bus connection)	GT15-75ABUSL GT15-75ABUS2L GT15-ABUS GT15-ABUS2			
GT15-A1SC□NB 05 : 0.45m 07 : 0.7m 30 : 3m 50 : 5m	A7GT-CNB	GT15-C□ EXSS-1 *4 100 : 10m 200 : 20m	15"GT1695 15"GT1595 12.1"GT1685 12.1"GT1585 10.4"GT157□ 8.4"GT156□ 5.7"GT155□	GT15-75ABUS2L GT15-ABUS2	GT15-C□BS 07 : 0.7m 12 : 1.2m 30 : 3m 50 : 5m 100 : 10m 200 : 20m	15" GT1695 15" GT1595 12.1" GT1685 12.1" GT1585 10.4" GT157□ 8.4" GT156□ 5.7" GT155□ 5.7" GT115□*7 (dedicated to bus connection)	GT15-75ABUSL GT15-75ABUS2L GT15-ABUS GT15-ABUS2			
		GT15-A1SC□B 07 : 0.7m 12 : 1.2m 30 : 3m 50 : 5m	15"GT1695 15"GT1595 12.1"GT1685 12.1"GT1585 10.4"GT157□ 8.4"GT156□ 5.7"GT155□	GT15-75ABUS2L GT15-ABUS2	GT15-C□BS 07 : 0.7m 12 : 1.2m 30 : 3m 50 : 5m 100 : 10m 200 : 20m	15"GT1695 15"GT1595 12.1"GT1685 12.1"GT1585 10.4"GT157□ 8.4"GT156□ 5.7"GT155□	GT15-75ABUS2L GT15-ABUS2	GT15-C□BS 07 : 0.7m 12 : 1.2m 30 : 3m 50 : 5m 100 : 10m 200 : 20m	15" GT1695 15" GT1595 12.1" GT1685 12.1" GT1585 10.4" GT157□ 8.4" GT156□ 5.7" GT155□ 5.7" GT115□*7 (dedicated to bus connection)	GT15-75ABUSL GT15-75ABUS2L GT15-ABUS GT15-ABUS2

*5: Indication of cable model (example) "GT15-A1SC□NB 05:0.45m"→GT15-A1SC05NB

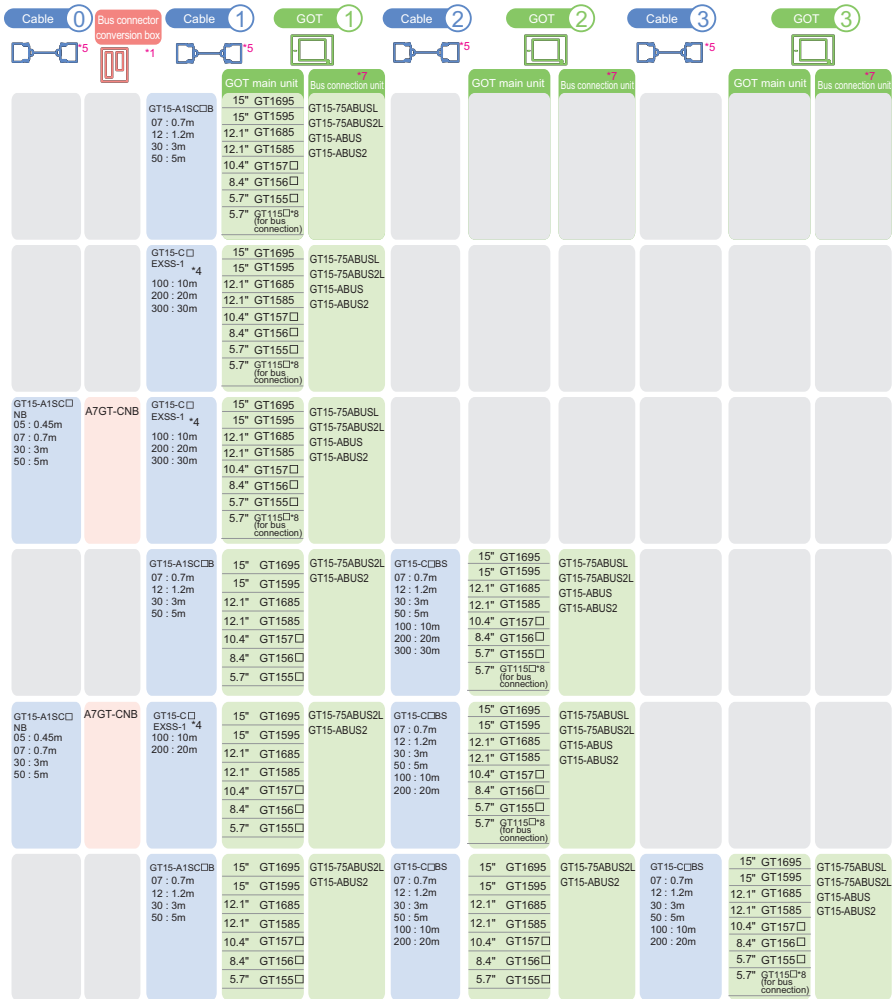
*6: Use the GT15-ABUS(2) for mounting the following units. GT15-75ABUS(2)L is not available.
Units for the multimedia function, Video/RGB display, RGB output, printer output, Ethernet download, gateway function, MES interface function, CF card unit, and CF card extension unit
For GT16, however, Ethernet download, gateway function, and MES interface function are available using the Ethernet interface.

*7: The bus connection unit is not required for GT115□ (dedicated to the bus connection).

●When connecting to motion controller CPU (A171SHCPUN, A172HCPUN, A173UHCPU(-S1)) with the extension base unit



*1: The extension cable length (between the main base units) is included.
For the cable between the main base unit and extension base unit, refer to Mitsubishi Programmable Logic Controller MELSEC-Q (Catalog) (L(NA)-08033E)
*2: When installing the 1st GOT 30m or more away from the main base unit, the bus connector conversion box is required.
*3: Select a cable to keep the total cable length between the main base unit of a programmable controller and a terminal GOT within 36m.



*4: For GT15-C□EXSS-1
- Consisting of GT15-EXCNB (0.5m) and GT15-C□BS (10 to 30m).
- When calculating the cable length, use GT15-C100EXSS-1 (10m), GT15-C200EXSS-1 (20m), and GT15-C300EXSS-1 (30m).

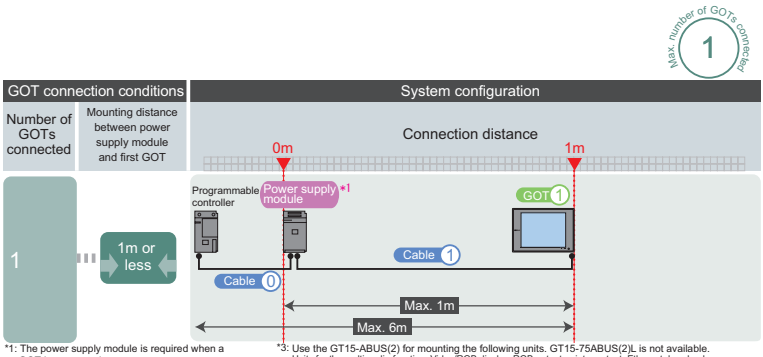
*5: Indication of cable model (example) "GT15-A1SC□NB 05:0.45m"→GT15-A1SC05NB

*6: Select a cable to keep the total cable length within 30m.

*7: Use the GT15-ABUS(2) for mounting the following units. GT15-75ABUS(2)L is not available. Units for the multimedia function, Video/RGB display, RGB output, printer output, Ethernet download, gateway function, MES interface function, CF card unit, and CF card extension unit For GT16, however, Ethernet download, gateway function, and MES interface function are available using the Ethernet interface.

*8: The bus connection unit is not required for GT115□(dedicated to the bus connection).

●When connecting to A0J2HCPU



*1: The power supply module is required when a GOT is connected.
*2: Indication of cable model
(Example) "GT15-J2C□ B 10: 1m" → GT15-J2C10B
*3: Use the GT15-ABUS(2) for mounting the following units. GT15-75ABUS(2)L is not available.
Units for the multimedia function, Video/RGB display, RGB output, printer output, Ethernet download, gateway function, MES interface function, CF card unit, and CF card extension unit
For GT16, however, Ethernet download, gateway function, and MES interface function are available using the Ethernet interface.
*4: The bus connection unit is not required for GT115□ (dedicated to the bus connection).

Precautions on bus connection

Setting stage No. and slot No. of GOT

1. GOT recognized by programmable controller

When a GOT is connected with bus connection, a programmable controller recognizes the GOT as shown below.

- QCPU (Q mode)
  Intelligent function module with 16 I/O points
- Other than QCPU (Q mode)
  Intelligent function module with 32 I/O points

2. I/O assignment

(1) Connecting to QCPU (Q mode)
Add one stage for connecting a GOT (16 points ×10 slots) and assign the GOT to the I/O slots.(The GOT cannot be assigned to empty I/O slots on the main base unit and extension base unit.)
Remarks /O slots to which a GOT is not assigned can be set as empty slots (0 point). The I/O numbers of 16 points × the number of the empty slots can be used for other devices.(Make settings in [PLC parameter] and then [I/O assignment] of GX Developer.)
Reference 9. Connecting to QCPU (Q mode) in "Precautions"
(2) Connecting to other than QCPU (Q mode)
Assign a GOT to the empty I/O slot on the extension base unit.
(When there is no extension base unit or there is no empty slot on the extension base unit, add a new extension stage and assign a GOT to the I/O slot of the new stage.)(The GOT cannot be assigned to empty I/O slots on the main base unit.)
Reference 10. Connecting to QnA(S)CPU type or An(S)CPU type in "Precautions"

Precautions

1. Turning on GOT

(1) Designing system
The programmable controller CPU remains reset until a GOT is started. A system where a GOT is started up by the sequence program cannot be designed.
(2) Time taken for programmable controller to be started after power-on of GOT
After a GOT is turned on, it takes approximately 10 seconds for the programmable controller to be started.
When adding a GOT to the existing system or replacing an existing GOT with another GOT, take the programmable controller's start-up time into account and adjust the timings in the system.
(3) Power-on order for case that three or more GOTs are connected to QCPU (Q mode)
Reference 9. (1) Restrictions for total cable length to number of GOTs connected
(4) Power-on order for case that GOT is connected to redundant Q4ARCPU system
Reference 13. (2) Power-on order for case that GOT is connected to redundant Q4ARCPU system
(5) Power-on order for case other than (3) and (4)
The GOT can be started up first and the programmable controller can also be started up first.
(There is no specific order in which the both devices are turned on.)) Note, however, that operation is as follows when the GOT is turned on before the programmable controller:
When a GOT is turned on while the programmable controlled is off, a system alarm (No.402: timeout error) occurs.When the programmable controller is turned on, the GOT automatically restarts monitoring.
Reset the alarm with the system information.

2. When a GOT is turned off or restarted (turned off and then on)

(1) Precautions for restarting (turning off and then on) a GOT
Do not restart (turn off and then on) a GOT while the programmable controller is turned on.
Be sure to turn off the programmable controller before restarting (turning off and then on) a GOT.
Remarks Operation that automatically reboots GOT1000 series
In GOT1000 series, a GOT is automatically rebooted for the following cases. It is not required to restart (turn off and on) the GOT.
- When OS is installed with GT Designer2 or the CF card
- When the utility settings are changed

(2) When a GOT is turned off before a user-created screen is displayed on the GOT
Communication may not be made when a GOT is turned off before a user-created screen is displayed on the GOT. In the above case, turn on a programmable controller and the GOT again.
(3) Power-on order for case that three or more GOTs are connected to QCPU (Q mode)
Reference 9. (1) Restrictions for total cable length to number of GOTs connected

3. Reset switch of GOT

The reset switch of the GOT does not operate with the bus connection.

4. When a programmable controller is turned off or reset

(1) When a programmable controller is turned off or reset during monitoring
When a programmable controller is turned off or reset during monitoring, a system alarm (No.402: timeout error) occurs.When the programmable controller is restored, a GOT automatically restarts monitoring. Reset the alarm with the system information.
(2) When a programmable controller is turned off or reset before a user-created screen is displayed on the GOT
Communication may not be made when a programmable controller is turned off or reset before a user-created screen is displayed on the GOT. In the above case, turn on a programmable controller and the GOT again.
(3) Power-on order for case that three or more GOTs are connected to QCPU (Q mode)
Reference 9. (1) Restrictions for total cable length to number of GOTs connected

5. Connecting location of GOT

A GOT must be connected to the base unit at the last stage of the system. The GOT cannot be connected between the base units.

6. When a GOT is connected to a programmable controller CPU with bus connection without the communication driver installed

When a GOT is connected to a programmable controller CPU with the bus connection without the standard monitor OS and the communication driver for bus connection installed, the programmable controller CPU is reset.(The GOT cannot communicate to the programmable controller with GX Developer or other software.) In the above case, reset of the programmable controller is canceled when the bus connection cable of the GOT is removed.

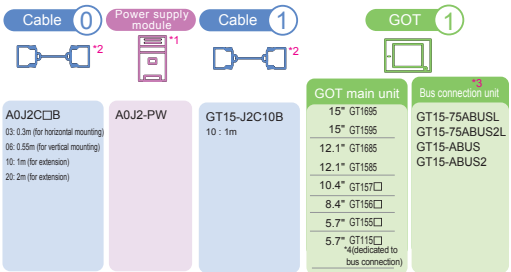
7. Designing system

The current listed below is supplied from a programmable controller (the power supply module of the main base unit) to a GOT when the GOT is turned off. (The GOT is not activated when the GOT is turned off.) The rated output current of a power supply module to be used at 5VDC includes the currents consumed by a module mounted on the main base unit at 5VDC and consumed by a GOT. Design a system to keep the total of the currents below the rated output current.

Target CPU	Number of GOTs connected	Total current consumption
Connecting to QCPU (Q mode)	5	2200mA
	4	1760mA
	3	1320mA
	2	880mA
	1	440mA
Connecting to CPU other than QCPU (Q mode)	3	360mA
	2	240mA
	1	120mA

8. When the I/O signals of a GOT are assigned

The I/O signals assigned to a programmable controller are used on a GOT system. Do not use the I/O signals in a sequence program.
Otherwise, functions of the GOT cannot be guaranteed.



9. Connecting to QCPU (Q mode)

(1) Restrictions for total cable length to number of GOTs connected
There are the following restrictions when three or more GOTs are connected.

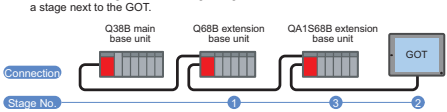
Number of GOTs connected	Total cable length			
	15m or less	15 to 20m or less	20 to 25m or less	25 to 37m or less
1	○	○	○	○
2	○	○	○	○
3	○	○	○	△
4	○	○	△	△
5	○	△	△	△

○ : There are no restrictions.
△ : Use the same power supplies of a programmable controller and all GOTs and turn on or off all the power supplies simultaneously.

(2) When using Q00JCPU
The bus extension connector box can be connected only to the extension base unit. (The bus extension connector box cannot be mounted on the main base unit.)

(3) When using Q00J, Q00, Q01 or Q02UCPU
When the GOT is connected to the Q00JCPU with the bus connection, the number of extension stages including the GOT must be two or less.
When the GOT is connected to the Q00CPU, Q01CPU or Q02UCPU with the bus connection, the number of extension stages including the GOT must be four or less.

(4) When using QA1S6□B extension base unit
Though the GOT is physically connected behind all the extension base units, assign the GOT to the stage right behind the Q□□B extension base unit in the extension stage number setting. Assign the QA1S6 □□B extension base unit as a stage next to the GOT.



10. Connecting to QnA(S)CPU type or An(S)CPU type

(1) Connecting to QnA(S)CPU type or An(S)CPU type
A GOT can be connected to an extension connector on only one side of the main base unit.(GOTs cannot be connected simultaneously to the extension connectors on bothsides.)

(2) When using Q4A(R)CPU, Q3ACPU, A□CPU or A4UCPU
At least one empty slot for an I/O module is required in a programmable controller system.

(3) When using A0J2HCPU
Assign the GOT to the I/O slots 0 to 3 of the first extension stage.

(4) When using CPUs other than CPUs of (2) and (3)
Even if the maximum number of stages are used with no empty I/O slots, when there is a free space of 32 I/O points or more, a GOT can be connected with the following communication interface setting.

Target CPU	Max. stage No.	Communication interface setting	
		Stage No.	Slot No.
A1□CPU/A2USCPU(-S1)	1	2	0
A2□CPU/Q2ACPU	3	4	0
A3□CPU/A4□CPU	7	Disabled	
Q3ACPU/Q4ACPU	7		
A0J2HCPU	1		

11. Connecting multiple GOTs

(1) System including different GOT series
The GOT1000 series cannot be used with different GOT series in a system.

(2) Restrictions on number of GOTs connected
There are restrictions on the number of GOTs connected depending on the target CPU and the number of intelligent function modules mounted.

Target CPU		Number of connectable GOTs	Total number of connectable GOTs and intelligent function modules *1
QCPU (Q mode)/Motion controller CPU (Q series)		5	5 GOTs and 6 intelligent function modules *2
QCPU (A mode)		Not connectable	6 in total
QnACPU		3	6 in total
ACPU	AnUCPU, AnACPU, A2US(H)CPU	3	2 in total
	AnNCPU, AnS(H)CPU, A1SJ(H)CPU	2	2 in total
	A0J2HCPU	1	—
	A1FXCPU	Not connectable	6 in total
Motion controller CPU(A series)	A273UCPU, A273UHCPU(-S3), A373UCPU(-S3), A173UHCPU(-S1)	3	2 in total
	A171SHCPUN, A172SHCPUN	2	

*1: The following shows the models of connectable intelligent function modules.
AD51(S3), AD51H(S), AD51FD(S3), AD57G(S3), AJ71C21(S1), AJ71C22(S1), AJ71C23, AJ71C24(S3/S6/S8), AJ71UC24, AJ71E71(-S3), AJ71E71N-B2/B5/T/B5T, AJ71E71N3-T, AJ61BT11 (only for the intelligent mode), A1SJ71C24(-R2/PRF/R4), A1SJ71UC24(-R2/PRF/R4), A1SJ71E71-B2/B5(-S3), A1SJ71E71N-B2/B5/T/B5T, A1SJ71E71N3-T, A1SD51S, A1SJ61BT11 (only for the intelligent mode)
*2: A1SD51S is the only intelligent function module that can be connected to a QCPU (Q mode).

12. When using programmable controller CPU in direct mode

When the I/O control mode of the programmable controller CPU is the direct mode, and if the first GOT is connected to the main or extension base unit with a 5m extension cable (GT15-AC50B, GT15-A1SC50NB), the input X of the empty I/O slot cannot be used.
No restrictions apply when the I/O control mode is the refresh mode.
On programmable controller CPUs whose I/O control mode can be selected by a switch, set the I/O control mode to the refresh mode before use.

Remarks Examples of using input X of an empty I/O slot
- When input X is assigned on the MELSECNET/10 network
- When input X of an empty I/O slot is turned on or off by the computer link module
- When input X of an empty I/O slot is turned on or off by the touch switch function (Bit SET/RST/Alternate/Momentary) of a GOT

13. Connecting to redundant Q4ARCPU system

(1) Connecting to redundant Q4ARCPU system with bus connection
Connect a GOT to the last redundant extension base unit (A68RB) of the redundant Q4ARCPU system.
For the redundant extension base units, use version B or later.
The version can be confirmed in the DATE field of the rating plate.

Remarks Precautions for redundant Q4ARCPU system configurations
- The GOT does not operate normally in the following system configurations.
- When the GOT is connected to the bus switching module (A6RAF) on the redundant main base unit (A32RB/A33RB) with the bus connection
- When the GOT is connected to the version A redundant extension base unit (A68RB) with the bus connection

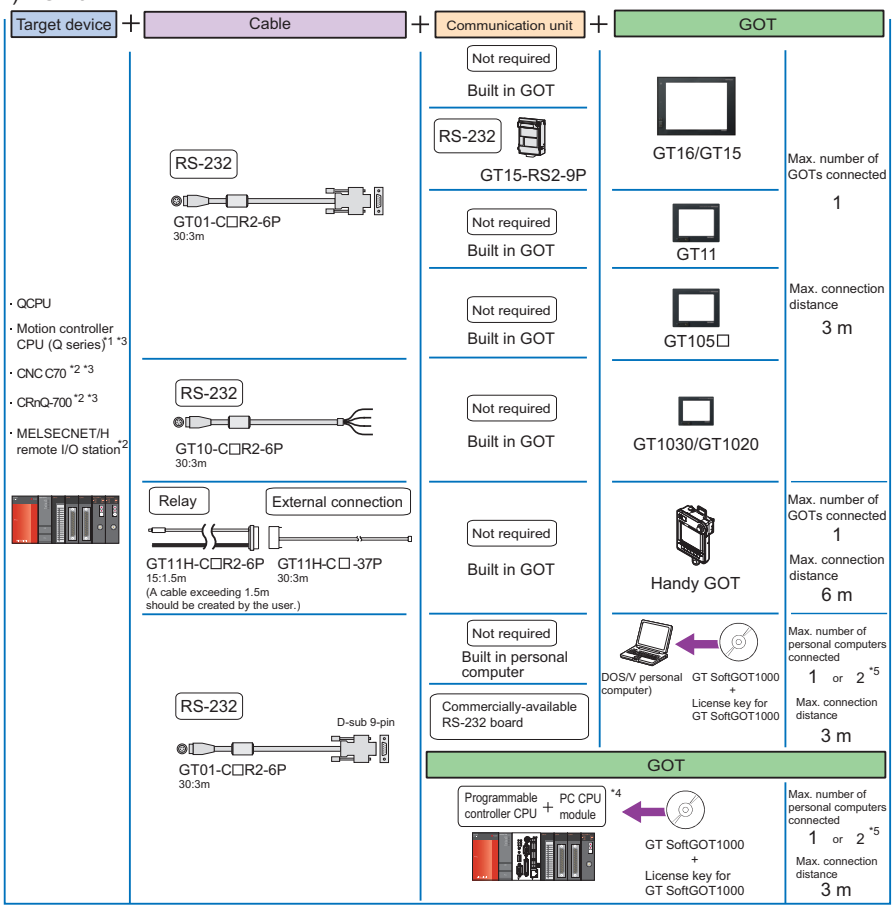
(2) Power-on order for GOT and redundant Q4ARCPU system
Turn on the GOT and Q4ARCPU redundant system in the following order.
1) Turn on the GOT.
2) After the monitor screen is displayed on the GOT, turn on the redundant Q4ARCPU system.A timeout error is displayed on the system alarm. Reset the alarm with the system information.

4.1.4 Direct CPU connection

●QCPU/Motion controller CPU (Q series)/CNC C70/Robot controller

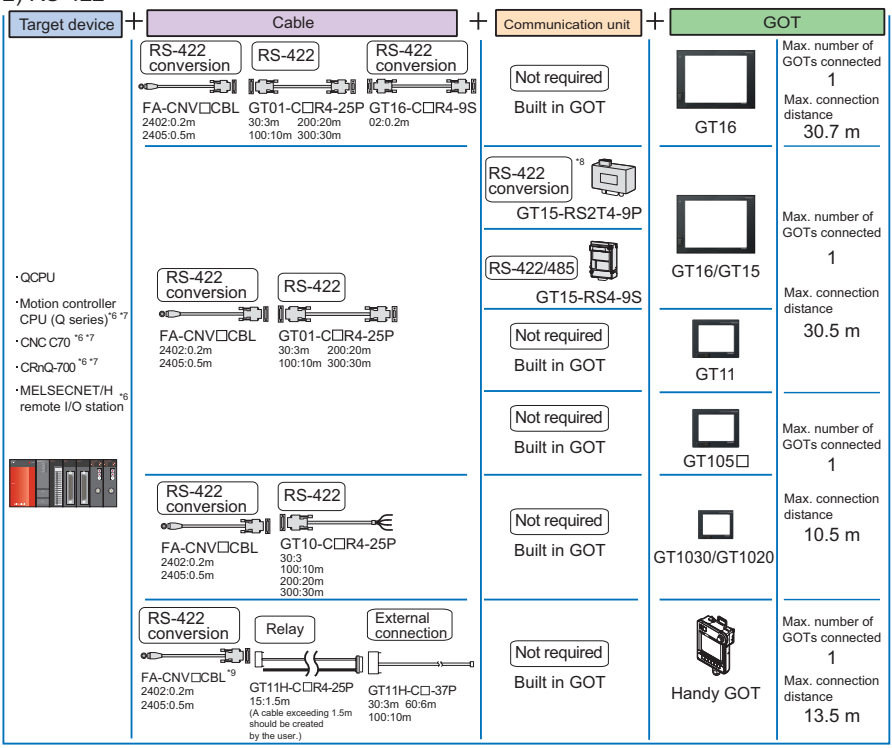
System configuration

1) RS-232



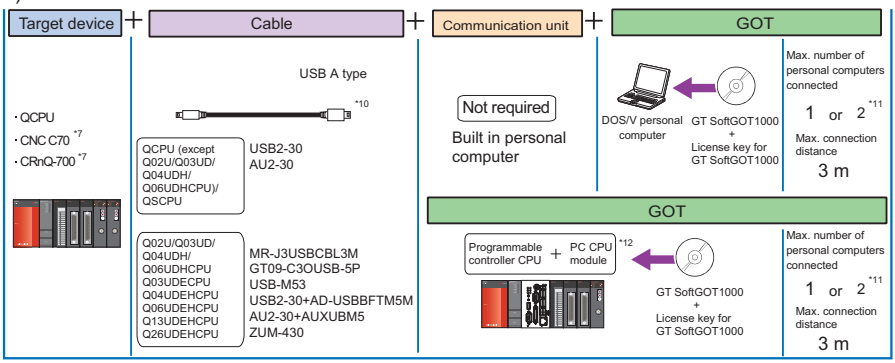
*1: Available only for GT16, GT15, GT11, and Handy GOT.
*2: Available only for GT16, GT15, GT11, Handy GOT, and GT SoftGOT
*3: Configure the multiple CPU system.
*4: Connect the PC CPU module to a programmable controller CPU on any of the other main base units.
*5: For using RS-232 and USB connections at the same time

2) RS-422



*6: Available only for GT16, GT15, GT11, and Handy GOT.
*7: Configure the multiple CPU system.
*8: Use GT15-RS4-9S for using GT155□.
*9: The FA-CNV□CBL is Recommended Product.
Purchase the cable from MITSUBISHI ELECTRIC ENGINEEERING CO., LTD.
*10: The USB communication cable is Recommended Product. Purchase the cable from ELECOM CO., LTD, ARVEL CORP or LOAS CO., LTD.
*11: For using RS-232 and USB connections at the same time
*12: Connect the PC CPU module to a programmable controller CPU on any of the other main base units.

3) USB



*6: Available only for GT16, GT15, GT11, and Handy GOT.
*7: Configure the multiple CPU system.
*8: Use GT15-RS4-9S for using GT155□.
*9: The FA-CNV□CBL is Recommended Product.
Purchase the cable from MITSUBISHI ELECTRIC ENGINEEERING CO., LTD.
*10: The USB communication cable is Recommended Product. Purchase the cable from ELECOM CO., LTD, ARVEL CORP or LOAS CO., LTD.
*11: For using RS-232 and USB connections at the same time
*12: Connect the PC CPU module to a programmable controller CPU on any of the other main base units.

The GOT model to be used differs depending on the connection type.

Series		Connection type	GOT model to be used
GT11		RS-232 or RS-422 connections	GT115□-Q□BD
		Bus connection	GT115□-Q□BDQ, GT115□-Q□BDA
	Handy GOT	RS-232 or RS-422 connections	GT115□HS-Q□BD
GT10	GT105□	RS-232 or RS-422 connections	GT105□-Q□BD
	GT1030 GT1020	RS-232 connection	GT1030-LBD2/GT1030-LBDW2, GT1020-LBD2/GT1020-LBDW2
		RS-422 connection	GT1030-LBD/GT1030-LBDW, GT1020-LBD/GT1020-LBDW, GT1020-LBL/GT1020-LBLW (For GT1020-LBL/GT1020-LBLW, MELSEC-FXCPU connection is available only.)

Precautions

Other precautions

- For connecting the GOT to the multiple CPU system (Q00CPU, Q01CPU, Q02CPU, Q02HCPU, Q06HCPU, Q12HCPU, and Q25HCPU), use CPUs with the function version B or later.
- When connecting to motion controller CPU (Q series)
  - For Q172CPU or Q173CPU
    (1) Use the motion controller CPU with the following production numbers.
    Q172CPU with K******* or later, Q173CPU with J******* or later
    (2) For using the SV13, SV22, and SV43, use a motion controller with the following OS installed.
    SW6RN-SV13Q□: 00E or later, SW6RN-SV22Q□: 00E or later, SW6RN-SV43Q□: 00B or later
  - For Q172CPUN or Q173CPUN
    For using the SV13, SV22, and SV43, use a motion controller with the following OS installed.
    SW6RN-SV13Q□: 00H or later, SW6RN-SV22Q□: 00H or later, SW6RN-SV43Q□: 00B or later
- When connecting GT16, GT15, GT11, and Handy GOT to motion controller CPU (Q series), CNC C70, or CRnQ-700
  Connect the GOT to motion controller CPU (Q series), CNC C70, or CRnQ-700 via the RS-232 interface of the QCPU in the multiple CPU system.
- When connecting GT SoftGOT1000 to CNC C70 or CRnQ-700
  Connect GT SoftGOT1000 to CNC C70 or CRnQ-700 via the RS-232 or USB interfaces of the QCPU in the multiple CPU system.

Related Manuals

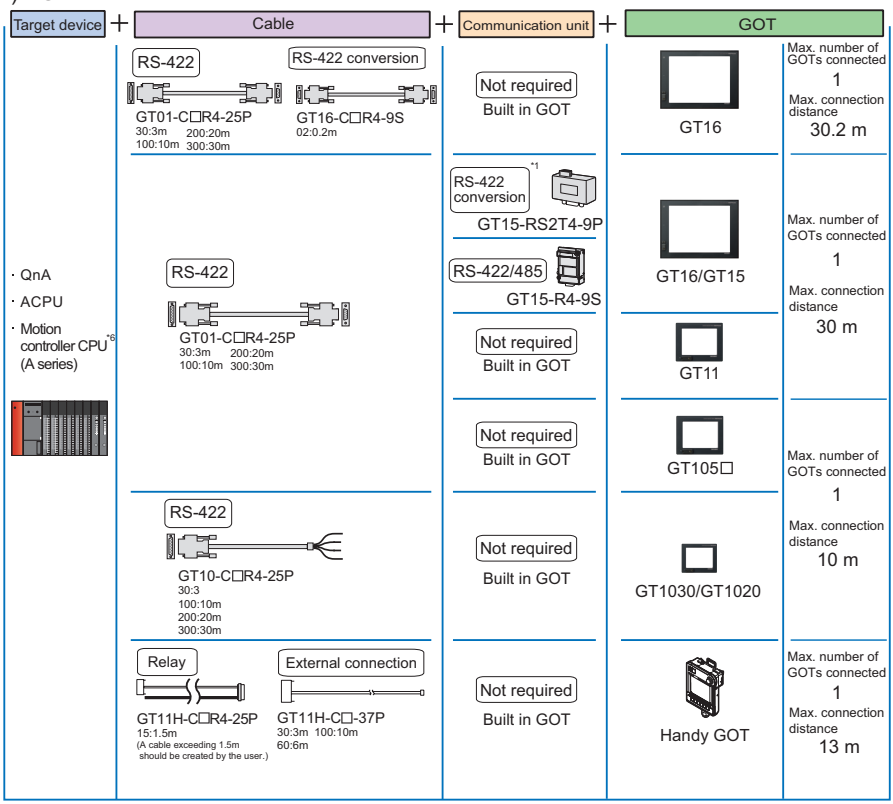
• For details of system configuration and connection cable • For precautions and restrictions • For outlined procedure and checking of direct CPU connection	Chapter 3 in GOT1000 Series Connection Manual (SH-080532ENG)
• For controllers that can be monitored by GOT and accessible range	Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)
• For connection method with Handy GOT	Chapter 10 in Handy GOT User's Manual (JY997D20101)
• For connection method with GT SoftGOT1000	Chapter 2 in GT SoftGOT1000 Version2 Operating Manual (SH-080602ENG)
• For controllers that can be monitored by GT SoftGOT1000 and accessible range	Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)

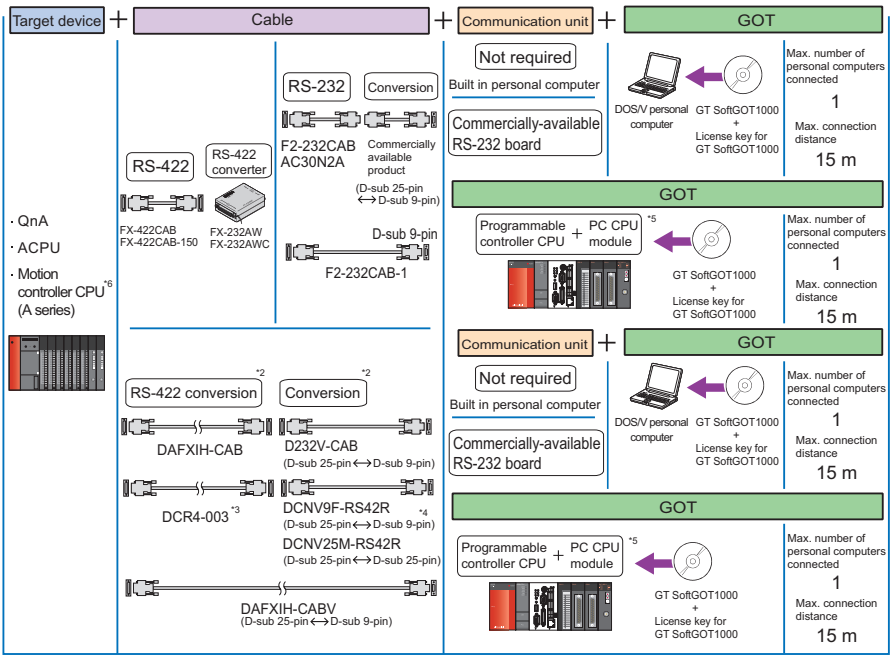
* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

●QnA/ACPU/Motion controller CPU (A series)

System configuration

1) RS-422





*1: Use the GT15-R4-9S for GT155□.
*2: Recommended Product.Purchase the cable from Diatrend Corporation.
*3: Keep the cable length of DCR4-003 (D-sub 25-pin↔D-sub 25-pin) below 3m.
*4: When using DCNV9F-RS42R, be sure to ground the FG terminal of a programmable controller system.
*5: Connect the PC CPU module to another programmable controller.
*6: Available only for GT16, GT15, GT11, Handy GOT, and GT SoftGOT1000

The GOT model to be used differs depending on the connection type.

Series		Connection type	GOT model to be used
GT11		RS-232 or RS-422 connections	GT115□-Q□BD
		Bus connection	GT115□-Q□BDQ, GT115□-Q□BDA
	Handy GOT	RS-232 or RS-422 connections	GT115□HS-Q□BD
GT10	GT105□	RS-232 or RS-422 connections	GT105□-Q□BD
	GT1030 GT1020	RS-232 connection	GT1030-LBD2/GT1030-LBDW2, GT1020-LBD2/GT1020-LBDW2
		RS-422 connection	GT1030-LBD/GT1030-LBDW, GT1020-LBD/GT1020-LBDW, GT1020-LBL/GT1020-LBLW (For GT1020-LBL/GT1020-LBLW, MELSEC-FXCPU connection is available only.)

Precautions

Precautions on system

- When connecting the motion controller (A series) to GT SoftGOT1000, simultaneous connection with other MELSOFT products (such as GX Developer) is not allowed.
- The motion controller (A series) cannot be connected to the remote I/O station.

Other precautions

- When monitoring MELSEC-A series (AnCPU type)*1, MELSEC-A series (AnSCPU type)*2, or MELSEC-A series*3, data can be written to only CPUs with the following software version or later.
  The earlier software version is not available.
  - AnNCPU (S1): Version L or later for the one with link, version H or later for the one without link
  - A2SCPU: Version H or later
  - A0J2HCPU (With/without link): Version E or later
  - A0J2HCPU-DC24: Version B or later
  - A2CCPU: Version H or later

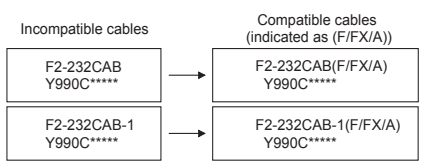
  *1: When connecting to A1NCPU, A1NCPUP21, A1NCPUR21, A2NCPU, A2NCPUP21, A2NCPUR21, CA2NCPU-S1, A2NCPUP21-S1, A2NCPUR21-S1, A3NCPU, or A3NCPUP21

  *2: When connecting to A2SCPU or A2SCPU-S1

  *3: When connecting to A0J2HCPU, A0J2HCPUP21, A0J2HCPUR21, A0J2HCPU-DC24, or A2CCPU

- When connecting or disconnecting converter/cable for GT SoftGOT1000
  - When connecting or disconnecting converter/cable that receives 5VDC power
    When connecting or disconnecting the converter/cable that receives 5VDC power from a programmable controller, power off the programmable controller and start working.
  - When connecting or disconnecting converter/cable that does not receive 5VDC power
    When connecting or disconnecting peripheral devices and the cables that do not receive 5VDC power from a programmable controller (receives the power from an external power supply), follow the procedure as below.
    1) Be sure to use an earth band or touch a grounded metal object before working to discharge the static electricity from the cables, human body, and others.
    2) Power off the personal computer.
    3) Power off the converter. When the converter/cable have an FG terminal, ground it.
    4) Connect/disconnect the converter/cable between the personal computer and programmable controller.
    5) Power on the converter.
    6) Power on the personal computer.
    7) Start up the software package.

- Use a RS-232 cable (F2-232CAB or F2-232CAB-1) applicable to the QnACPU or ACPU (For GT SoftGOT1000).
  For distinguishing cables applicable to the QnACPU and ACPU, check the indication of the model label on the cable. (Inapplicable cables are not available.)



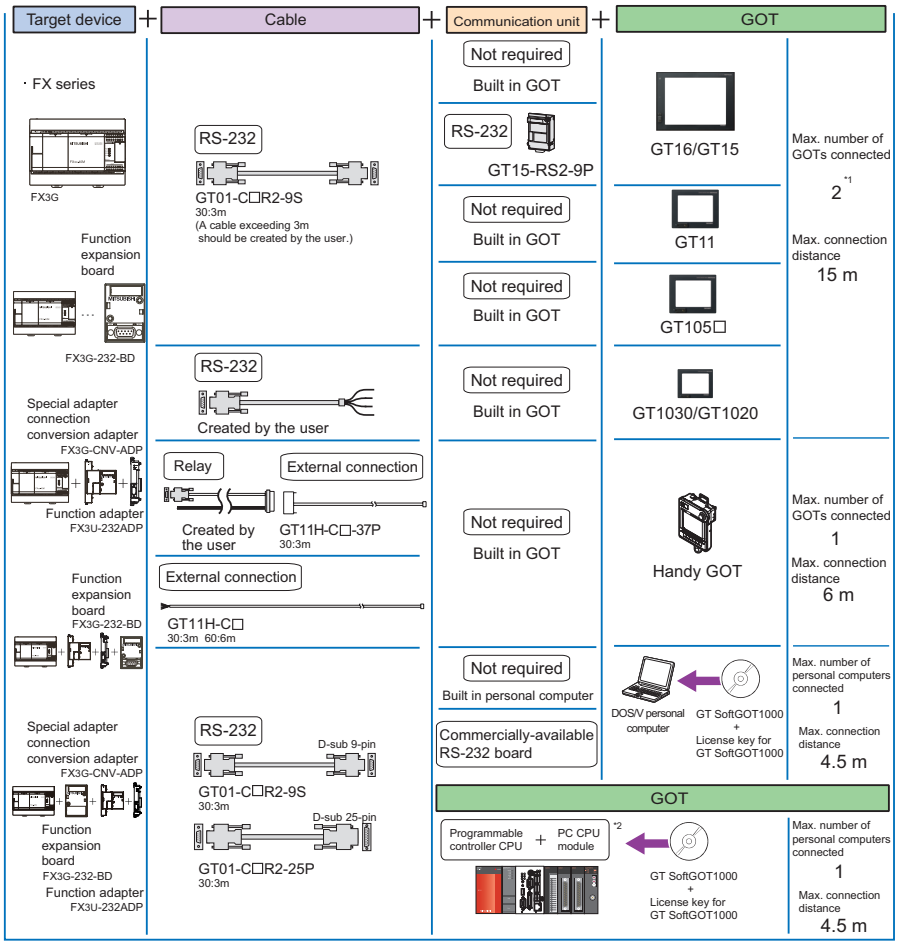
Related Manuals

• For details of system configuration and connection cable • For precautions and restrictions • For outlined procedure and checking of direct CPU connection	➤	Chapter 3 in GOT1000 Series Connection Manual (SH-080532ENG)
• For controllers that can be monitored by GOT and accessible range	➤	Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)
• For connection method with Handy GOT	➤	Chapter 10 in Handy GOT User's Manual (JY997D20101)
• For connection method with GT SoftGOT1000	➤	Chapter 2 in GT SoftGOT1000 Version2 Operating Manual (SH-080602ENG)
• For controllers that can be monitored by GT SoftGOT1000 and accessible range	➤	Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)

* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

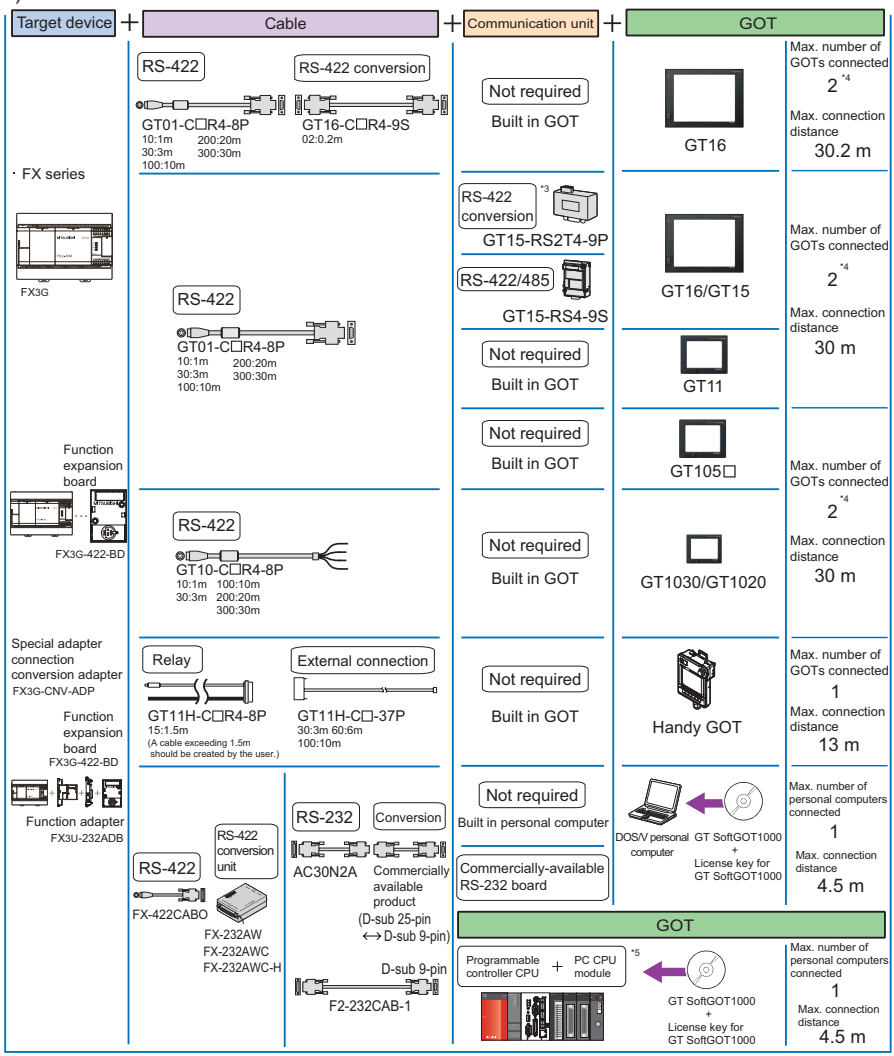
System configuration

1) RS-232



*1: When using the function expansion board (FX3G-232-BD) or the function adapter (FX3U-232ADP)
*2: Connect the PC CPU module to another programmable controller.

2) RS-422



*3: Use GT15-RS4-9S for using GT155□.
*4: When using the CPU port (RS-422) and function expansion board (FX3G-422-BD)
*5: Connect the PC CPU module to another programmable controller.

The GOT model to be used differs depending on the connection type.

Series		Connection type	GOT model to be used
GT11		RS-232 or RS-422 connections	GT115□-Q□BD
		Bus connection	GT115□-Q□BDQ, GT115□-Q□BDA
	Handy GOT	RS-232 or RS-422 connections	GT115□HS-Q□BD
GT10	GT105□	RS-232 or RS-422 connections	GT105□-Q□BD
	GT1030 GT1020	RS-232 connection	GT1030-LBD2/GT1030-LBDW2, GT1020-LBD2/GT1020-LBDW2
		RS-422 connection	GT1030-LBD/GT1030-LBDW, GT1020-LBD/GT1020-LBDW, GT1020-LBL/GT1020-LBLW (For GT1020-LBL/GT1020-LBLW, MELSEC-FXCPU connection is available only.)

Precautions

Precautions on system

- The function expansion boards and function adapters that can be connected to the GOT are the FX3G-232-BD, FX3G-422-BD, and FX3U-232ADP only.

Precautions on setup

- When connecting or disconnecting converter/cable for GT SoftGOT1000
  - When connecting or disconnecting converter/cable that receives 5VDC power
    When connecting or disconnecting the converter/cable that receives 5VDC power from a programmable controller, power off the programmable controller and start working.
  - When connecting or disconnecting converter/cable that does not receive 5VDC power
    When connecting or disconnecting peripheral devices and the cables that do not receive 5VDC power from a programmable controller (receives the power from an external power supply), follow the procedure as below.
    1) Be sure to use an earth band or touch a grounded metal object before working to discharge the static electricity from the cables, human body, and others.
    2) Power off the personal computer.
    3) Power off the converter. When the converter/cable have an FG terminal, ground it.
    4) Connect/disconnect the converter/cable between the personal computer and programmable controller.
    5) Power on the converter.
    6) Power on the personal computer.
    7) Start up the software package.

Related Manuals

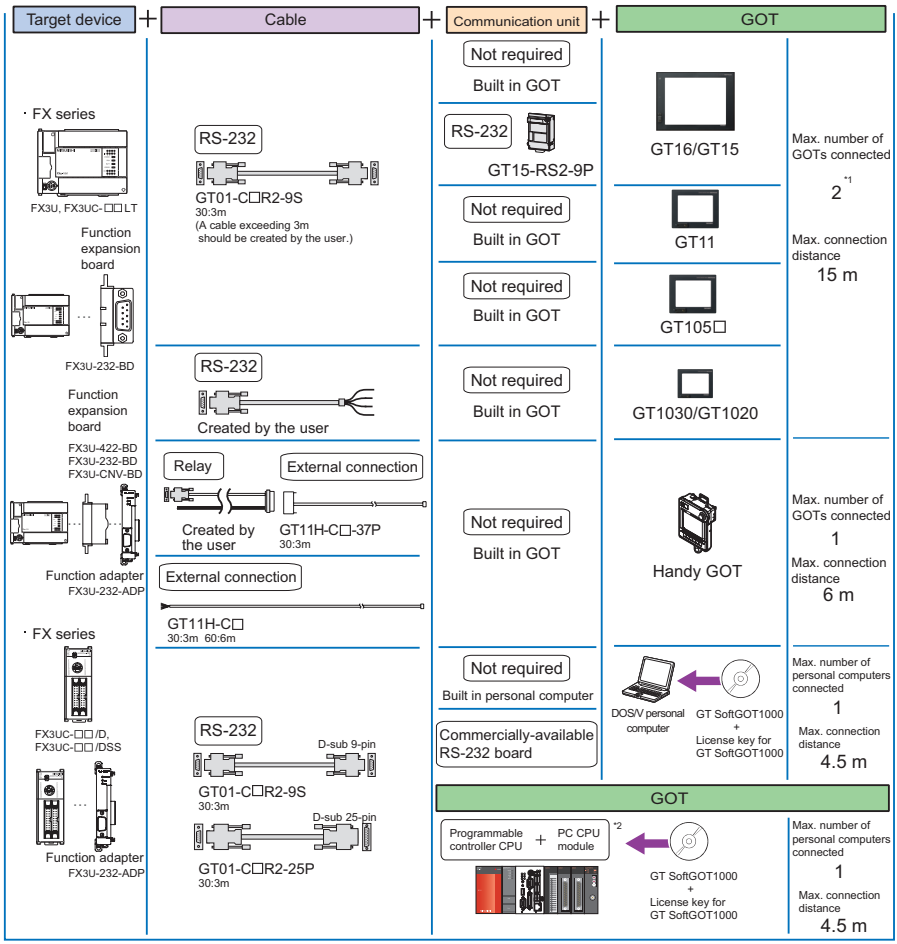
• For details of system configuration and connection cable • For precautions and restrictions • For outlined procedure and checking of direct CPU connection	Chapter 3 in GOT1000 Series Connection Manual (SH-080532ENG)
• For controllers that can be monitored by GOT and accessible range	Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)
• For connection method with Handy GOT	Chapter 10 in Handy GOT User's Manual (JY997D20101)
• For connection method with GT SoftGOT1000	Chapter 2 in GT SoftGOT1000 Version2 Operating Manual (SH-080602ENG)
• For controllers that can be monitored by GT SoftGOT1000 and accessible range	Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)

* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

MEMO

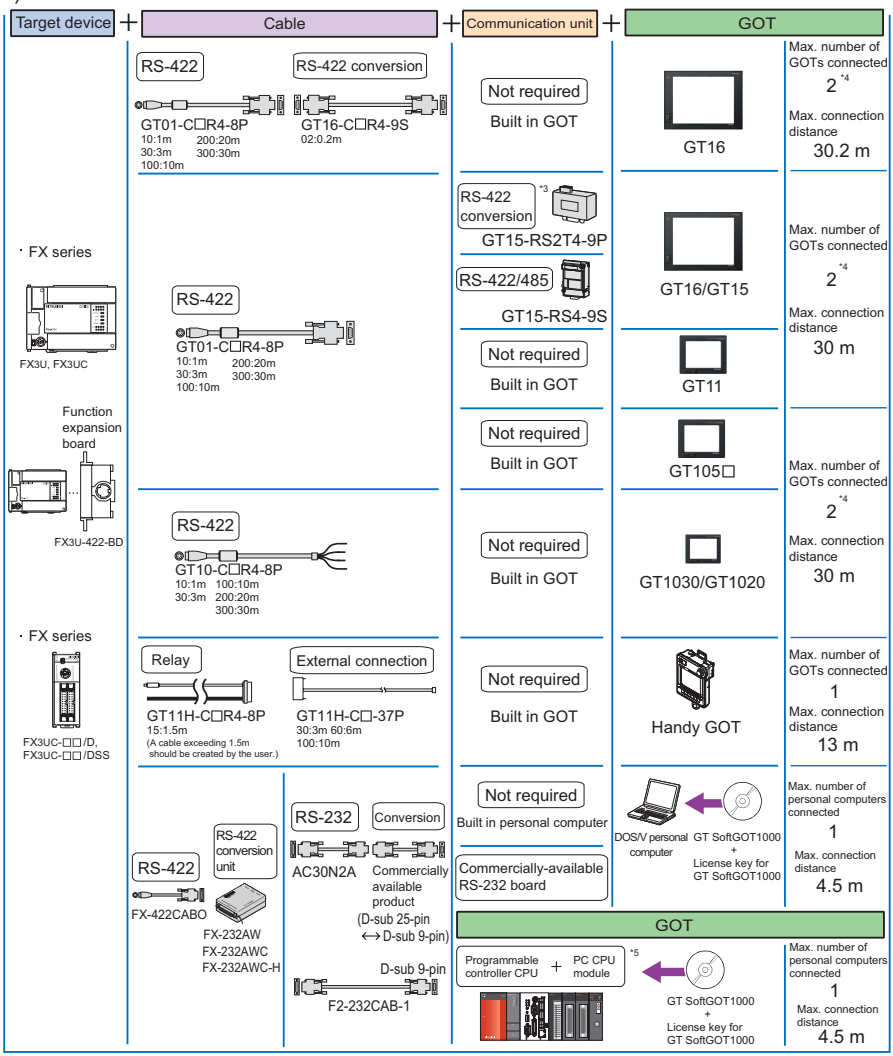
System configuration

1) RS-232



*1: When using the function expansion board (FX3U-232-BD) or the function adapter (FX3U-232ADP)
*2: Connect the PC CPU module to another programmable controller.

2) RS-422



*3: Use GT15-RS4-9S for using GT155□.
*4: When using the CPU port (RS-422) and function expansion board (FX3U-422-BD)
*5: Connect the PC CPU module to another programmable controller.

The GOT model to be used differs depending on the connection type.

Series		Connection type	GOT model to be used
GT11		RS-232 or RS-422 connections	GT115□-Q□BD
		Bus connection	GT115□-Q□BDQ, GT115□-Q□BDA
	Handy GOT	RS-232 or RS-422 connections	GT115□HS-Q□BD
GT10	GT105□	RS-232 or RS-422 connections	GT105□-Q□BD
	GT1030 GT1020	RS-232 connection	GT1030-LBD2/GT1030-LBDW2, GT1020-LBD2/GT1020-LBDW2
		RS-422 connection	GT1030-LBD/GT1030-LBDW, GT1020-LBD/GT1020-LBDW, GT1020-LBL/GT1020-LBLW (For GT1020-LBL/GT1020-LBLW, MELSEC-FXCPU connection is available only.)

Precautions

Precautions on system

- The function expansion boards and function adapters that can be connected to the GOT are the FX3U-232-BD, FX3U-422-BD, and FX3U-232ADP only.

Precautions on setup

- When connecting or disconnecting converter/cable for GT SoftGOT1000
  - When connecting or disconnecting converter/cable that receives 5VDC power
    When connecting or disconnecting the converter/cable that receives 5VDC power from a programmable controller, power off the programmable controller and start working.
  - When connecting or disconnecting converter/cable that does not receive 5VDC power
    When connecting or disconnecting peripheral devices and the cables that do not receive 5VDC power from a programmable controller (receives the power from an external power supply), follow the procedure as below.
    1) Be sure to use an earth band or touch a grounded metal object before working to discharge the static electricity from the cables, human body, and others.
    2) Power off the personal computer.
    3) Power off the converter. When the converter/cable have an FG terminal, ground it.
    4) Connect/disconnect the converter/cable between the personal computer and programmable controller.
    5) Power on the converter.
    6) Power on the personal computer.
    7) Start up the software package.

Other precautions

- When a keyword is registered for the FXCPU (FX3U/FX3UC series), the GOT may not monitor the CPU. Execute the I/O check again. When the I/O check result is normal, check the keyword registration of the CPU.
- When connecting the FX-232AWC-H to the FX3UCCPU, the transmission speed of 600, 19200, 38400, 57600, or 115200bps can be used.
  When connecting the FX-232AWC or FX-232AW to the FX3UCCPU, the transmission speed of 9600 or 19200bps can be used.

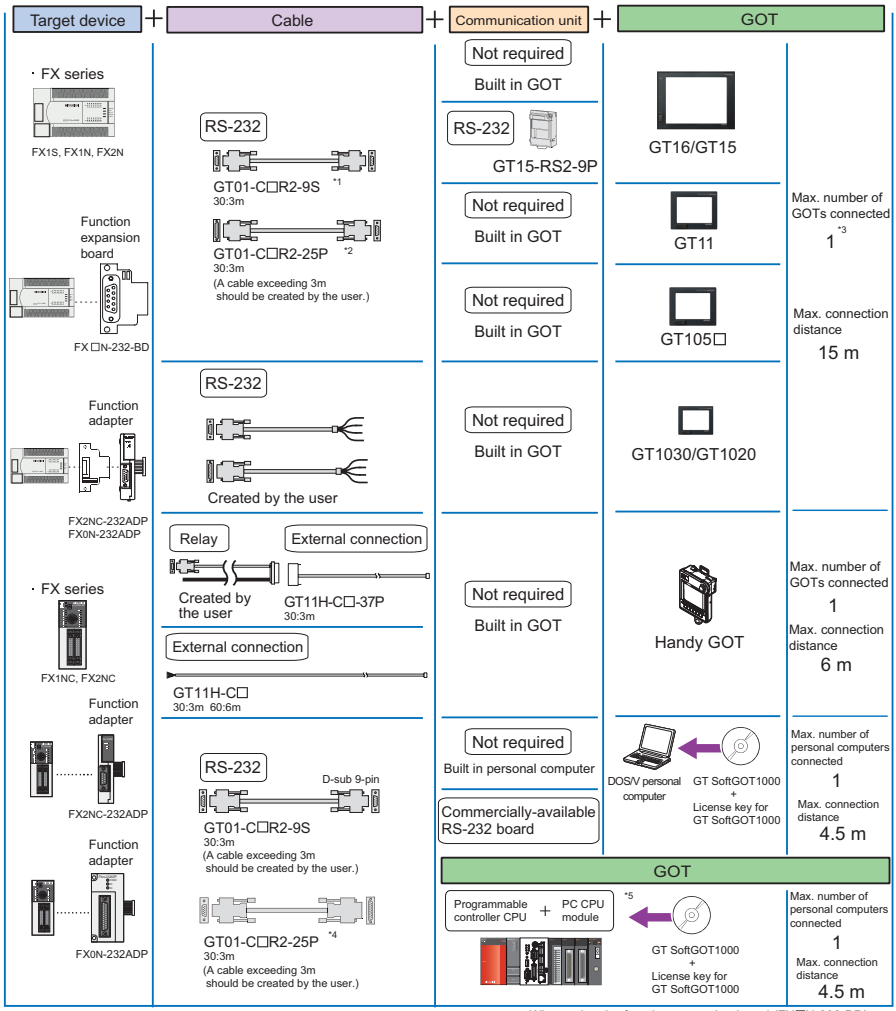
Related Manuals

• For details of system configuration and connection cable • For precautions and restrictions • For outlined procedure and checking of direct CPU connection	➤	Chapter 3 in GOT1000 Series Connection Manual (SH-080532ENG)
• For controllers that can be monitored by GOT and accessible range	➤	Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)
• For connection method with Handy GOT	➤	Chapter 10 in Handy GOT User's Manual (JY997D20101)
• For connection method with GT SoftGOT1000	➤	Chapter 2 in GT SoftGOT1000 Version2 Operating Manual (SH-080602ENG)
• For controllers that can be monitored by GT SoftGOT1000 and accessible range	➤	Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)

* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

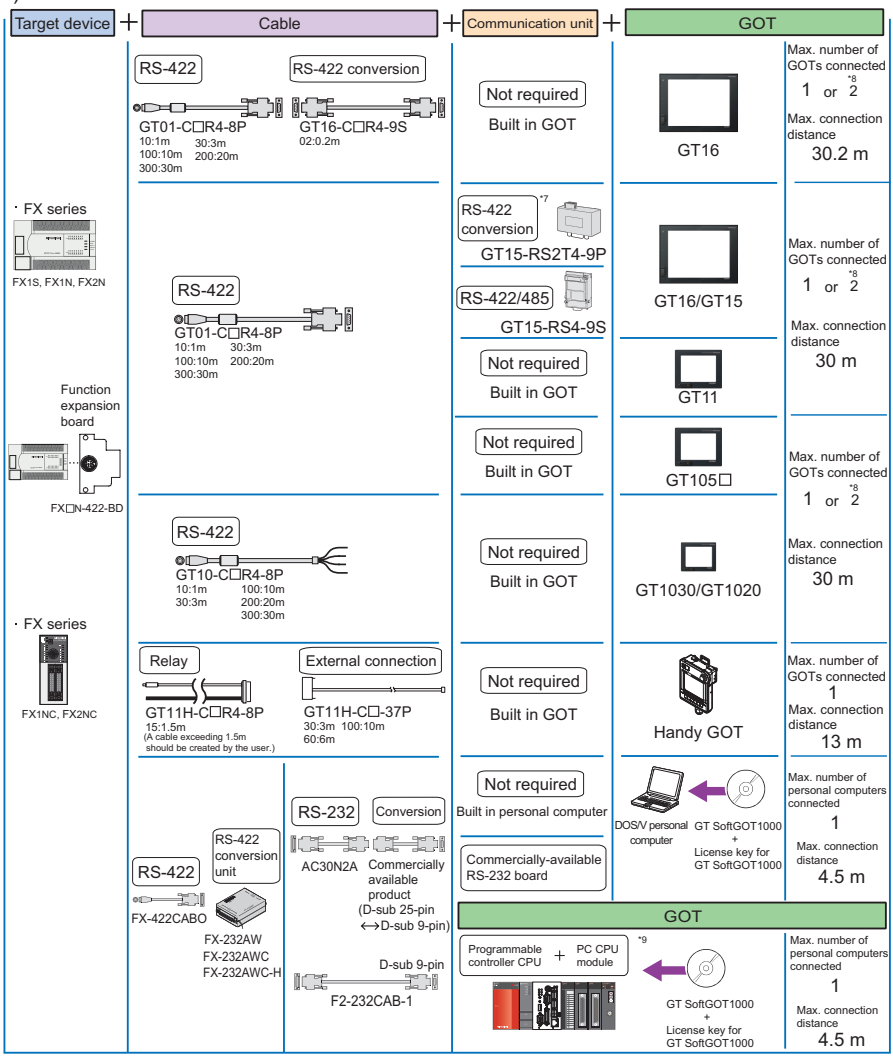
System configuration

1) RS-232



*1: FX1S, FX1N, FX2N ····· When using the function expansion board (FX□N-232-BD) or thefunction adapter (FX2NC-232ADP)
FX1NC, FX2NC ····· When using the function adapter (FX2NC-232ADP)
*2: When using the function adapter (FX0N-232ADP)
*3: When using the function expansion board indicated in *1 or *2 or the function adapter
*4: When using the FX0N-232ADP, connect the D-sub 9-pin cable to the PC. When using the FX□N-232-BD and FX2NC-232ADP, connect the D-sub 25-pin cable to the PC.
*5: Connect the PC CPU module to another programmable controller.

2) RS-422



*7: Use GT15-RS4-9S for using GT155□.
*8: FX1S, FX1N, FX2N ····· When used with the function expansion board (FX□N-422-BD)
FX1NC, FX2NC ····· Only one GOT can be connected for the RS-422 connection.
*9: Connect the PC CPU module to another programmable controller.

The GOT model to be used differs depending on the connection type.

Series		Connection type	GOT model to be used
GT11		RS-232 or RS-422 connections	GT115□-Q□BD
		Bus connection	GT115□-Q□BDQ, GT115□-Q□BDA
	Handy GOT	RS-232 or RS-422 connections	GT115□HS-Q□BD
GT10	GT105□	RS-232 or RS-422 connections	GT105□-Q□BD
	GT1030 GT1020	RS-232 connection	GT1030-LBD2/GT1030-LBDW2, GT1020-LBD2/GT1020-LBDW2
		RS-422 connection	GT1030-LBD/GT1030-LBDW, GT1020-LBD/GT1020-LBDW, GT1020-LBL/GT1020-LBLW (For GT1020-LBL/GT1020-LBLW, MELSEC-FXCPU connection is available only.)

Precautions

Precautions on setup

- When connecting or disconnecting converter/cable for GT SoftGOT1000
  - When connecting or disconnecting converter/cable that receives 5VDC power
    When connecting or disconnecting the converter/cable that receives 5VDC power from a programmable controller, power off the programmable controller and start working.
  - When connecting or disconnecting converter/cable that does not receive 5VDC power
    When connecting or disconnecting peripheral devices and the cables that do not receive 5VDC power from a programmable controller (receives the power from an external power supply), follow the procedure as below.
    1) Be sure to use an earth band or touch a grounded metal object before working to discharge the static electricity from the cables, human body, and others.
    2) Power off the personal computer.
    3) Power off the converter. When the converter/cable have an FG terminal, ground it.
    4) Connect/disconnect the converter/cable between the personal computer and programmable controller.
    5) Power on the converter.
    6) Power on the personal computer.
    7) Start up the software package.

Related Manuals

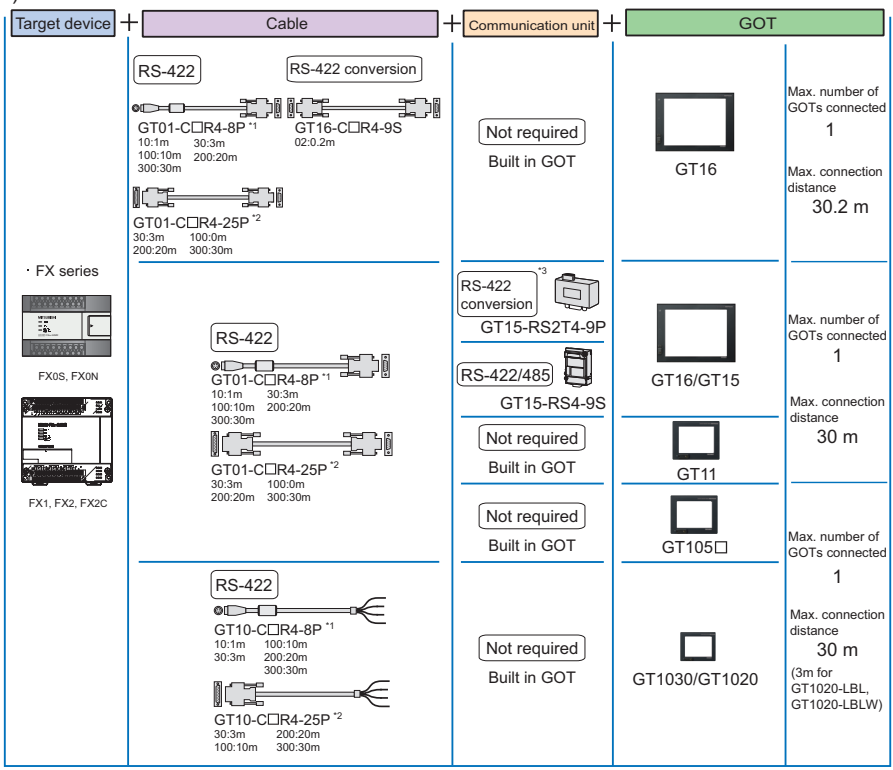
• For details of system configuration and connection cable • For precautions and restrictions • For outlined procedure and checking of direct CPU connection	Chapter 3 in GOT1000 Series Connection Manual (SH-080532ENG)
• For controllers that can be monitored by GOT and accessible range	Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)
• For connection method with Handy GOT	Chapter 10 in Handy GOT User's Manual (JY997D20101)
• For connection method with GT SoftGOT1000	Chapter 2 in GT SoftGOT1000 Version2 Operating Manual (SH-080602ENG)
• For controllers that can be monitored by GT SoftGOT1000 and accessible range	Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)

* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

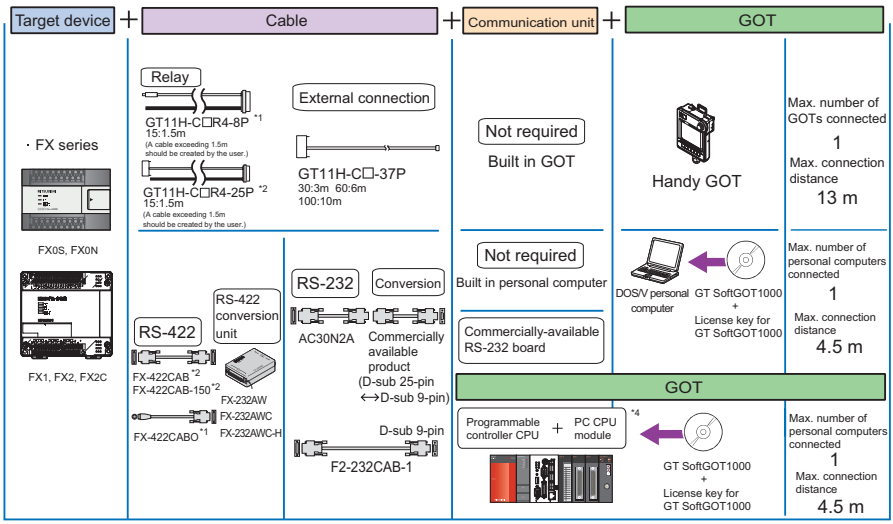
MEMO

System configuration

1) RS-422



*1: When connecting to FX0S or FX0N
*2: When connecting to FX1, FX2, or FX2C
*3: Use GT15-RS4-9S for usingGT155□.
*4: Connect the PC CPU module to another programmable controller.



*1: When connecting to FX0S or FX0N
*2: When connecting to FX1, FX2, or FX2C
*3: Use GT15-RS4-9S for usingGT155□.
*4: Connect the PC CPU module to another programmable controller.

The GOT model to be used differs depending on the connection type.

Series		Connection type	GOT model to be used
GT11		RS-232 or RS-422 connections	GT115□-Q□BD
		Bus connection	GT115□-Q□BDQ, GT115□-Q□BDA
	Handy GOT	RS-232 or RS-422 connections	GT115□HS-Q□BD
GT10	GT105□	RS-232 or RS-422 connections	GT105□-Q□BD
	GT1030 GT1020	RS-232 connection	GT1030-LBD2/GT1030-LBDW2, GT1020-LBD2/GT1020-LBDW2
		RS-422 connection	GT1030-LBD/GT1030-LBDW, GT1020-LBD/GT1020-LBDW, GT1020-LBL/GT1020-LBLW (For GT1020-LBL/GT1020-LBLW, MELSEC-FXCPU connection is available only.)

Precautions

Other precautions

- When connecting or disconnecting converter/cable for GT SoftGOT1000
  - When connecting or disconnecting converter/cable that receives 5VDC power
    When connecting or disconnecting the converter/cable that receives 5VDC power from a programmable controller, power off the programmable controller and start working.
  - When connecting or disconnecting converter/cable that does not receive 5VDC power
    When connecting or disconnecting peripheral devices and the cables that do not receive 5VDC power from a programmable controller (receives the power from an external power supply), follow the procedure as below.
    1) Be sure to use an earth band or touch a grounded metal object before working to discharge the static electricity from the cables, human body, and others.
    2) Power off the personal computer.
    3) Power off the converter. When the converter/cable have an FG terminal, ground it.
    4) Connect/disconnect the converter/cable between the personal computer and programmable controller.
    5) Power on the converter.
    6) Power on the personal computer.
    7) Start up the software package.

Related Manuals

• For details of system configuration and connection cable • For precautions and restrictions • For outlined procedure and checking of direct CPU connection	Chapter 3 in GOT1000 Series Connection Manual (SH-080532ENG)
• For controllers that can be monitored by GOT and accessible range	Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)
• For connection method with Handy GOT	Chapter 10 in Handy GOT User's Manual (JY997D20101)
• For connection method with GT SoftGOT1000	Chapter 2 in GT SoftGOT1000 Version2 Operating Manual (SH-080602ENG)
• For controllers that can be monitored by GT SoftGOT1000 and accessible range	Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)

* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

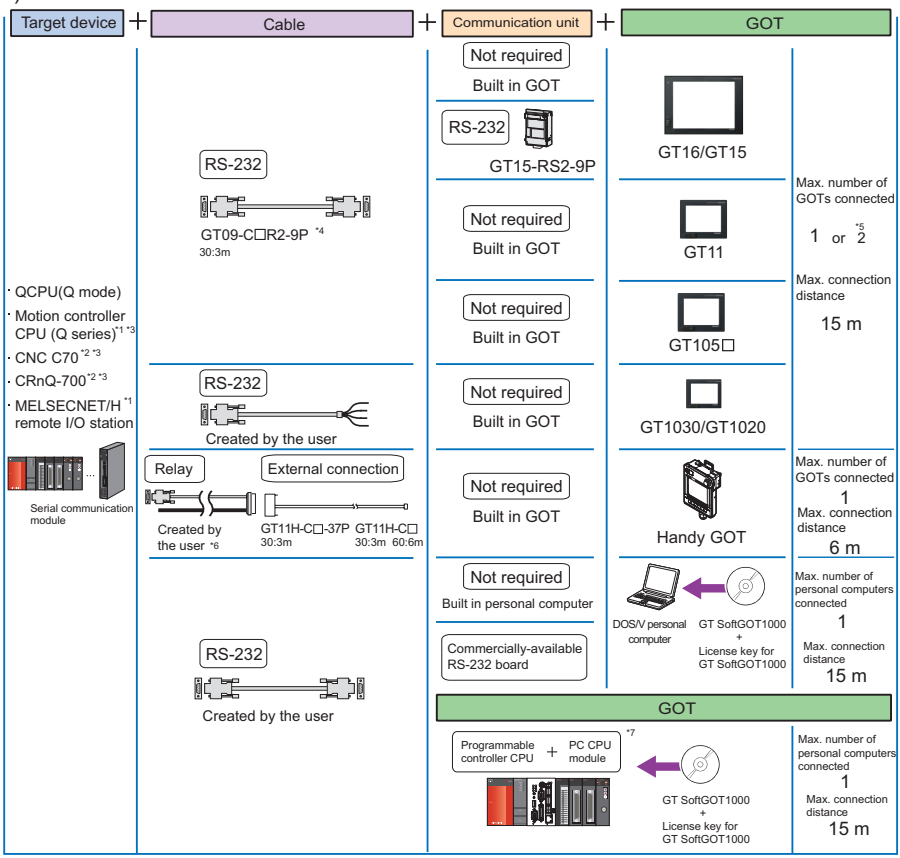
MEMO

4.1.5 Computer link connection

● QCPU (Q mode)/Motion controller CPU (Q series)/CNC C70/Robot controller

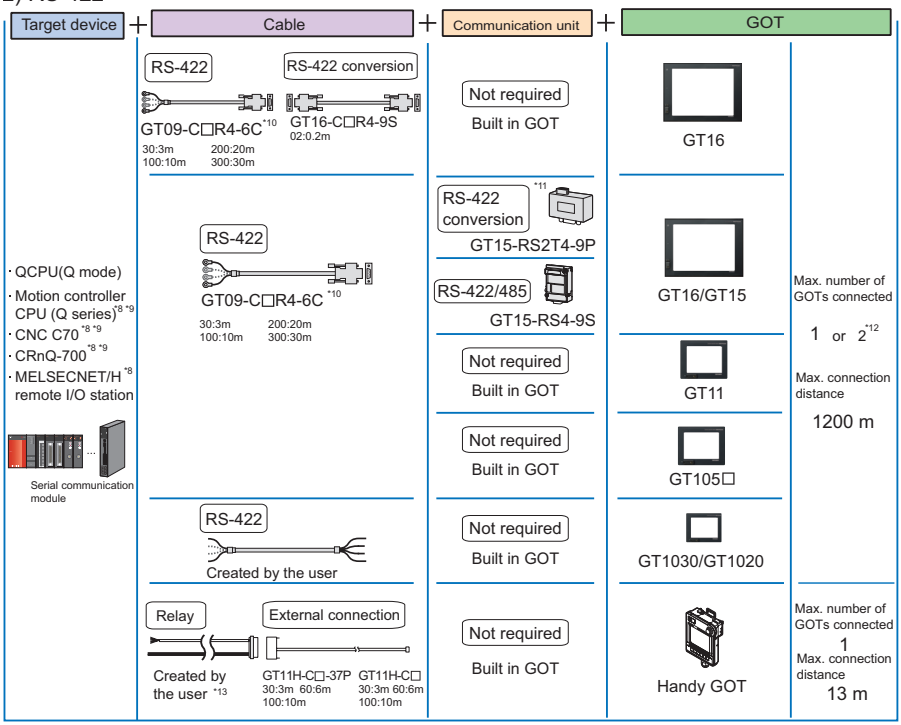
System configuration

1) RS-232



*1: Available only for GT16, GT15, GT11, and Handy GOT.
*2: Available only for GT16, GT15, GT11, Handy GOT, and GT SoftGOT1000
*3: Configure the multiple CPU system.
*4: Recommended Product. Purchase the cable from Mitsubishi Electric System & Service Co., Ltd.
*5: When using QJ71C24N(-R2/R4)
*6: Required for using GT11H-C□-37P.
*7 Connect the PC CPU module to another programmable controller.

2) RS-422



*8: Available only for GT16, GT15, GT11, and Handy GOT.
*9: Configure the multiple CPU system.
*10: Recommended Product. Purchase the cable from Mitsubishi Electric System & Service Co., Ltd.
*11: Use GT15-RS4-9S for using GT155□.
*12: When using QJ71C24N(-R2/R4)
*13: Required for using GT11H-C□-37P.

The GOT model to be used differs depending on the connection type.

Series		Connection type	GOT model to be used
GT11		RS-232 or RS-422 connections	GT115□-Q□BD
		Bus connection	GT115□-Q□BDQ, GT115□-Q□BDA
	Handy GOT	RS-232 or RS-422 connections	GT115□HS-Q□BD
GT10	GT105□	RS-232 or RS-422 connections	GT105□-Q□BD
	GT1030 GT1020	RS-232 connection	GT1030-LBD2/GT1030-LBDW2, GT1020-LBD2/GT1020-LBDW2
		RS-422 connection	GT1030-LBD/GT1030-LBDW, GT1020-LBD/GT1020-LBDW, GT1020-LBL/GT1020-LBLW (For GT1020-LBL/GT1020-LBLW, MELSEC-FXCPU connection is available only.)

Available module

Serial communication module/Computer link module*14		
Model	**CH1**	**CH2**
QJ71C24*15	RS-232	RS-422/485
QJ71C24-R2*15	RS-232	RS-232
QJ71C24N	RS-232	RS-422/485
QJ71C24N-R2	RS-232	RS-232
QJ71C24N-R4*16	RS-422/485	RS-422/485
QJ71CMO*17*18	Modular connector	RS-232
QJ71CMON*17*18	Modular connector	RS-232

*14 Communications via the RS-485 interface cannot be executed. A0J2-C214-S1 cannot be used.
*15 Either CH1 or CH2 can be used for the function version A. CH1 can be used with CH2 for the function version B or later.
*16 Not available for GT SoftGOT1000.
*17 Connectable only with CH2.
*18 Not available for GT10.

Precautions

Precautions on system

- Connecting the GOT directly to Basic model QCPU is recommended. The GOT is not applicable to the serial communication function for Basic model QCPU.
- Connect a terminating resistor (330Ω, 1/4W (orange, orange, brown, □)) to the serial communication module/computer link module.
  The GOT has a built-in terminating resistor.

Other precautions

- For connecting the GOT to the multiple CPU system (Q00CPU, Q01CPU, Q02CPU, Q02HCPU, Q06HCPU, Q12HCPU, and Q25HCPU), use CPUs with the function version B or later.
- When connecting to motion controller CPU (Q series)
  - For Q172CPU or Q173CPU
    Use the motion controller CPU with the following production numbers.
    Q172CPU with N******* or later, Q173CPU with M******* or later

  For Q172CPU, Q173CPU, Q172CPUN, or Q173CPUN
  For using the SV13, SV22, and SV43, use a motion controller with the following OS installed.
  SW6RN-SV13Q□: 00H or later, SW6RN-SV22Q□: 00H or later, SW6RN-SV43Q□: 00B or later

Related Manuals

• For details of system configuration and connection cable • For precautions and restrictions • For outlined procedure and checking of computer link connection	Chapter 4 in GOT1000 Series Connection Manual (SH-080532ENG)
• For controllers that can be monitored by GOT and accessible range	Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)
• For connection method with Handy GOT	Chapter 10 in Handy GOT User's Manual (JY997D20101)
• For connection method with GT SoftGOT1000	Chapter 2 in GT SoftGOT1000 Version2 Operating Manual (SH-080602ENG)
• For controllers that can be monitored by GT SoftGOT1000 and accessible range	Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)

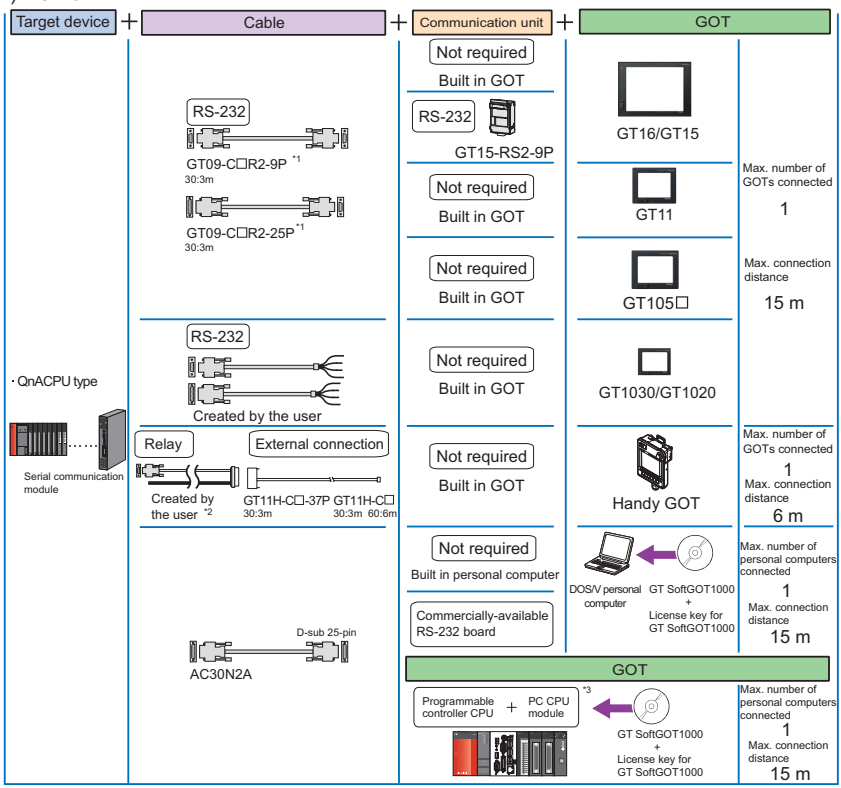
* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

MEMO

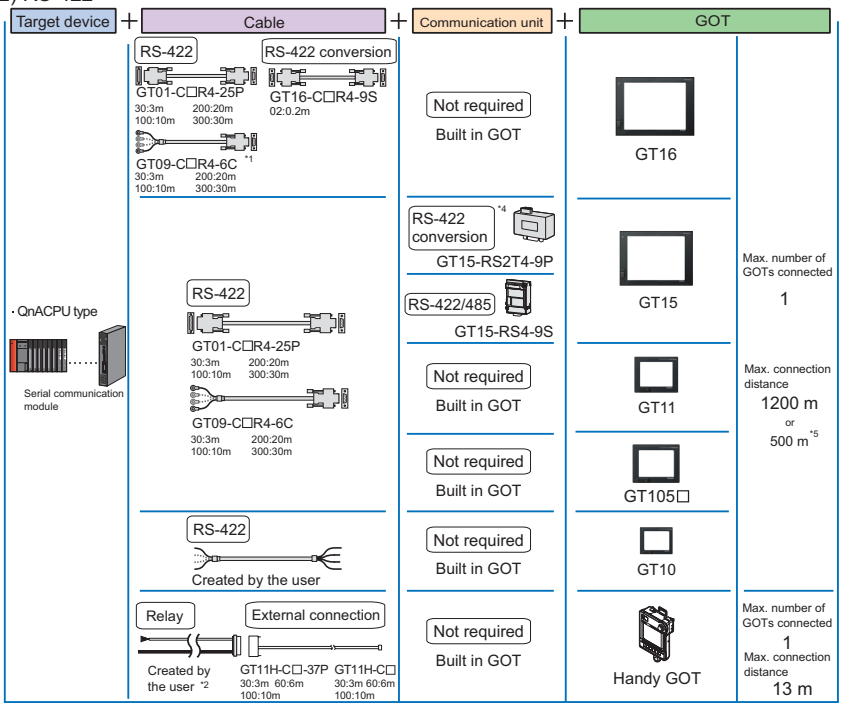
●QnACPU type

System configuration

1) RS-232



2) RS-422



*1: Recommended Product. Purchase the cable from Mitsubishi Electric System & Service Co., Ltd.
*2: When using GT11H-C□-37P
*3: Connect the PC CPU module to another programmable controller.
*4: Use GT15-RS4-9S for using GT155□.
*5: When using A1SJ71UC24

The GOT model to be used differs depending on the connection type.

Series		Connection type	GOT model to be used
GT11		RS-232 or RS-422 connections	GT115□-Q□BD
		Bus connection	GT115□-Q□BDQ, GT115□-Q□BDA
	Handy GOT	RS-232 or RS-422 connections	GT115□HS-Q□BD
GT10	GT105□	RS-232 or RS-422 connections	GT105□-Q□BD
	GT1030 GT1020	RS-232 connection	GT1030-LBD2/GT1030-LBDW2, GT1020-LBD2/GT1020-LBDW2
		RS-422 connection	GT1030-LBD/GT1030-LBDW, GT1020-LBD/GT1020-LBDW, GT1020-LBL/GT1020-LBLW (For GT1020-LBL/GT1020-LBLW, MELSEC-FXCPU connection is available only.)

Available module

Serial communication module/Computer link module*6		
Model	**CH1**	**CH2**
AJ71QC24*7	RS-232	RS-422/485
AJ71QC24-R2*7	RS-232	RS-232
AJ71QC24-R4*7*8	RS-422	RS-422/485
AJ71QC24N*7	RS-232	RS-422/485
AJ71QC24N-R2*7	RS-232	RS-232
AJ71QC24N-R4*7*8	RS-422	RS-422/485
A1SJ71QC24*7	RS-232	RS-422/485
A1SJ71QC24-R2*7	RS-232	RS-232
A1SJ71QC24N*7	RS-232	RS-422/485
A1SJ71QC24N-R2*7	RS-232	RS-232
A1SJ71QC24N1*7	RS-232	RS-422/485
A1SJ71QC24N1-R2*7	RS-232	RS-232
AJ71UC24*7*9*10	RS-232	RS-422/485
A1SJ71UC24-R2*9*10	RS-232	-
A1SJ71UC24-R4*9*10	RS-422/485	-

*6 Communications via the RS-485 interface cannot be executed. A0J2-C214-S1 cannot be used.
When the A series computer link module is used with the QnACPU, the devices that can be monitored are only devices with the same name as the devices in the device range of the AnACPU. Note that the following devices cannot be monitored.
- Devices newly added to the QnACPU
- Latch relays (L) and step relays (S)
(For the QnACPU, the latch relay (L) and step relay (S) are different from the internal relay (M). However, the internal relay is accessed even if the latch relay or the step relay is specified.)
- File register (R)

*7 Either CH1 or CH2 can be used.

*8 Not available for GT SoftGOT1000.

*9 Not available for GT10.

*10 The module operates in the device range of the AnACPU. (The R device is not available.)

Precautions

Precautions on system

- Connect a terminating resistor (330Ω, 1/4W (orange, orange, brown, □)) to the serial communication module/computer link module.
The GOT has a built-in terminating resistor.

Precautions on setup

- When the A series computer link module is used with the QnACPU, the QnACPU cannot be monitored with GT SoftGOT1000.

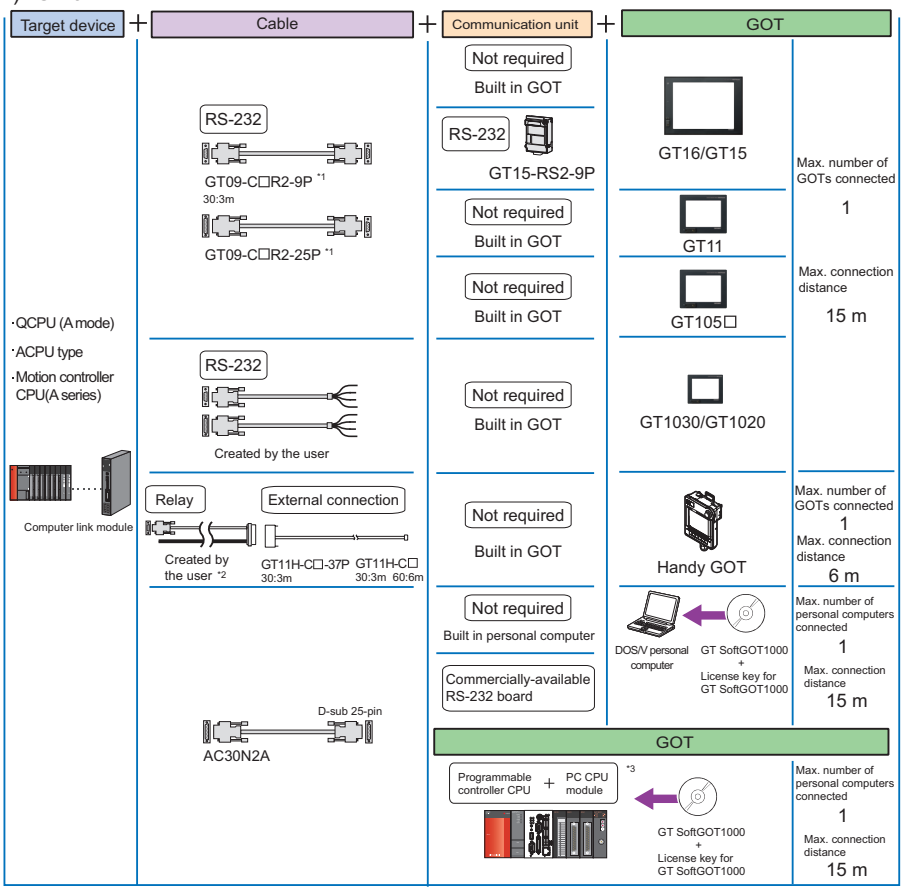
Related Manuals

• For details of system configuration and connection cable • For precautions and restrictions • For outlined procedure and checking of computer link connection	➤	Chapter 4 in GOT1000 Series Connection Manual (SH-080532ENG)
• For controllers that can be monitored by GOT and accessible range	➤	Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)
• For connection method with Handy GOT	➤	Chapter 10 in Handy GOT User's Manual (JY997D20101)
• For connection method with GT SoftGOT1000	➤	Chapter 2 in GT SoftGOT1000 Version2 Operating Manual (SH-080602ENG)
• For controllers that can be monitored by GT SoftGOT1000 and accessible range	➤	Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)

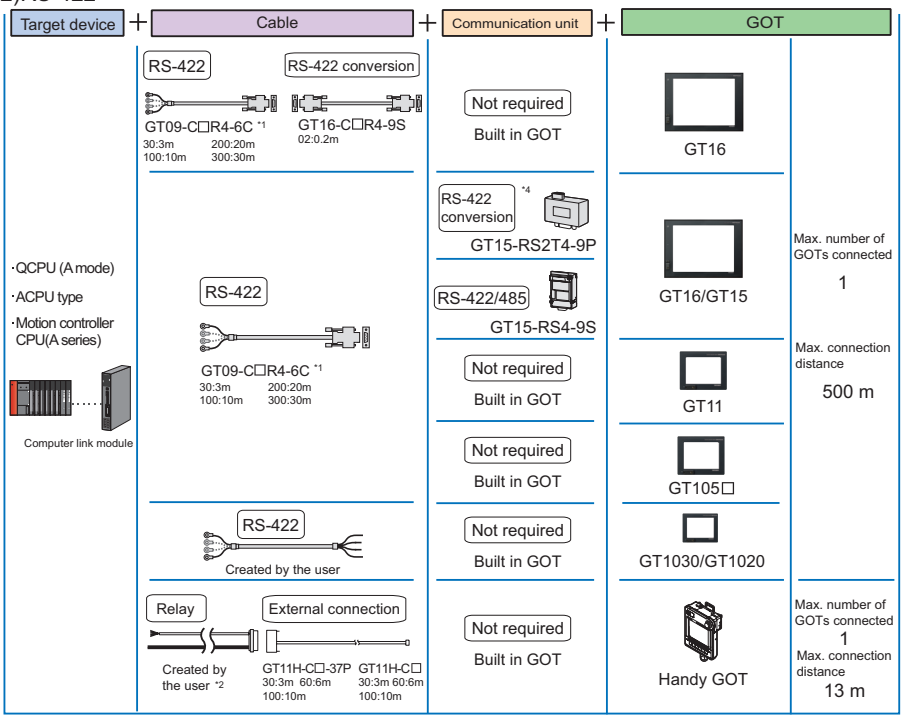
* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

System configuration

1)RS-232



2)RS-422



*1: Recommended Product. Purchase the cable from Mitsubishi Electric System & Service Co., Ltd.
*2: Required for using GT11H-C□-37P.
*3: Connect the PC CPU module to another programmable controller.
*4: Use GT15-RS4-9S for usingGT155□.

The GOT model to be used differs depending on the connection type.

Series		Connection type	GOT model to be used
GT11		RS-232 or RS-422 connections	GT115□-Q□BD
		Bus connection	GT115□-Q□BDQ, GT115□-Q□BDA
	Handy GOT	RS-232 or RS-422 connections	GT115□HS-Q□BD
GT10	GT105□	RS-232 or RS-422 connections	GT105□-Q□BD
	GT1030 GT1020	RS-232 connection	GT1030-LBD2/GT1030-LBDW2, GT1020-LBD2/GT1020-LBDW2
		RS-422 connection	GT1030-LBD/GT1030-LBDW, GT1020-LBD/GT1020-LBDW, GT1020-LBL/GT1020-LBLW (For GT1020-LBL/GT1020-LBLW, MELSEC-FXCPU connection is available only.)

Available module

CPU series	Serial communication module/Computer link module*5		
	Model	CH1	CH2
MELSEC-Q series (A mode)	A1SJ71UC24-R2	RS-232	-
	A1SJ71UC24-R4*8	RS-422/485	-
MELSEC-A series Motion controller CPU (A series)	AJ71UC24*6*7	RS-232	RS-422/485
	AJ71C24-S8*10	RS-232	RS-422
	A1SJ71UC24-R2*7	RS-232	-
	A1SJ71UC24-R4*7*8	RS-422/485	-
	A1SJ71C24-R2*7*9	RS-232	-
	A1SJ71C24-R4*7*8*9	RS-422/485	-
	A1SCPUC24-R2*7	RS-232	-
	A2CCPUC24*6	RS-232	RS-422/485

*5 Communications via the RS-485 interface cannot be executed. A0J2-C214-S1 cannot be used.
*6 Either CH1 or CH2 can be used.
*7 When connecting to A1SHCPU, A2SCPU (S1), A2SHCPU (S1), A1SJHCPU, A0J2HCP, A171SHCPU (N), or A172SHCPU, use the computer link module with the software version U or later.
*8 Not available for GT SoftGOT1000.
*9 The module operates in the device range of the AnACPU. (The R device is not available.)
*10 Available only for GT SoftGOT1000.

Precautions

Precautions on system

- Connect a terminating resistor (330Ω, 1/4W (orange, orange, brown, □)) to the serial communication module/computer link module.
  The GOT has a built-in terminating resistor.
- The motion controller (A series) cannot be connected to the remote I/O station.

Precautions on setup

- When connecting GT11 to A series computer link module
  When connecting the GT11 to the A series computer link module via the RS-232 communication, set the buffer memory for the module without checking the CD signal.

Related Manuals

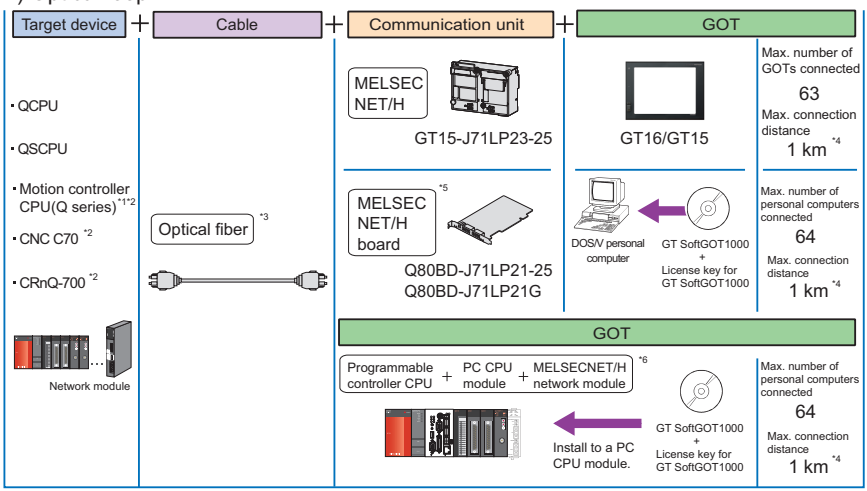
• For details of system configuration and connection cable • For precautions and restrictions • For outlined procedure and checking of computer link connection	Chapter 4 in GOT1000 Series Connection Manual (SH-080532ENG)
• For controllers that can be monitored by GOT and accessible range	Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)
• For connection method with Handy GOT	Chapter 10 in Handy GOT User's Manual (JY997D20101)
• For connection method with GT SoftGOT1000	Chapter 2 in GT SoftGOT1000 Version2 Operating Manual (SH-080602ENG)
• For controllers that can be monitored by GT SoftGOT1000 and accessible range	Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)

* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

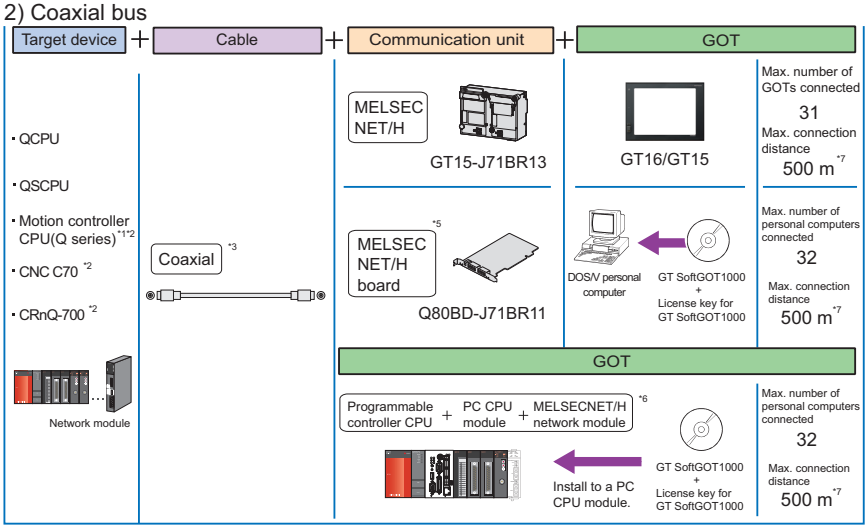
MEMO

System configuration

1) Optical loop



2) Coaxial bus



*1: GT SoftGOT1000 is not available.
*2: Configure the multiple CPU system.
*3: For the cable type to be used, refer to the MELSECNET/H reference manual.
*4: Distance between stations for using the QSI optical cable.The overall extension cable length and the length between stations differ depending on the cable type to be used and the total number of stations.For details, refer to the MELSECNET/H reference manual.
*5: When connecting to the Q redundant system, use the version K or later for the MELSECNET/H board driver (SW0DNC-MNETH-B).
*6: Connect the PC CPU module to another programmable controller,
*7: Distance between stations for using the 5C-2V coaxial cable. The overall extension cable length and the length between stations differ depending on the cable type to be used and the total number of stations. For details, refer to the MELSECNET/H reference manual.

Available module

CPU series	MELSECNET/H module	
	Optical loop	Coaxial bus
MELSEC-Q series (Q mode)*6 MELSEC-QS series	QJ71LP21 QJ71LP21-25 QJ71LP21S-25	QJ71BR11

*8 Use the CPU and MELSECNET/H network module with the function version B or later.

Precautions

Precautions on system

- Connectable network
  A GOT is connected to the following network systems as a normal station.
  - Optical loop system of MELSECNET/H network system (programmable controller to programmable controller network)
  - Coaxial bus system of MELSECNET/H network system (programmable controller to programmable controller network)
- When using MELSECNET/H network module
  When connecting the MELSECNET/H network module to MELSECNET/H network system, set the network type to the MELSECNET/H mode or the MELSECNET/H extended mode.
- Creating network
  For the network where a GOT is connected, create a MELSECNET/H network (programmable controller to programmable controller network).
  The GOT cannot be connected to the following network.
  - MELSECNET/H system (remote I/O network)
- Applicable range for monitoring
  A GOT can only monitor a programmable controller on the network where the GOT is connected. Note that the routing parameter setting is required when monitoring the programmable controller CPU on the other network.
- Network type setting
  - When setting the network type, set all the network modules in the same network to the same network type.
    (The MELSECNET/H mode and MELSECNET/H extended mode cannot be set simultaneously.)
  - For the MELSECNET/H connection with the redundant QCPU system, the network type cannot be set to [MNET/H EXT mode].
- When connecting to QCPU (Q mode)
  For MELSECNET/H network module and QCPU (Q mode), use the function version B or later.
- The motion controller (A series) cannot be connected to the remote I/O station.
- When using the QSCPU
  The GOT can only read device data and sequence programs by the ladder monitor function in the QSCPU.
  The GOT cannot write any data to the QSCPU.

Precautions on setup

- When changing the switch setting
  When changing the switch setting after installing the MELSECNET/H communication unit on the GOT, reset the GOT.
- Correctly solder the connector for the coaxial cable.
  Incomplete soldering causes malfunctions.

Other precautions

- For connecting the GOT to the multiple CPU system (Q00CPU, Q01CPU, Q02CPU, Q02HCPU, Q06HCPU, Q12HCPU, and Q25HCPU), use CPUs with the function version B or later.
- In the redundant QCPU system, the MELSECNET/H extended mode is not available.
- When connecting to motion controller CPU (Q series)
  - For Q172CPU or Q173CPU
    Use the motion controller CPU with the following production numbers.
    Q172CPU with N******* or later, Q173CPU with M******* or later
  - For Q172CPU, Q173CPU, Q172CPUN, or Q173CPUN
    For using the SV13, SV22, and SV43, use a motion controller with the following OS installed.
    SW6RN-SV13Q□: 00H or later, SW6RN-SV22Q□: 00H or later, SW6RN-SV43Q□: 00B or later

Related Manuals

- For details of system configuration and connection cable
- For precautions and restrictions
- For outlined procedure and checking of MELSECNET/H connection

→ Chapter 5 in GOT1000 Series Connection Manual (SH-080532ENG)

- For controllers that can be monitored by GOT and accessible range

→ Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)

- For connection method with GT SoftGOT1000

→ Chapter 2 in GT SoftGOT1000 Version2 Operating Manual (SH-080602ENG)

- For controllers that can be monitored by GT SoftGOT1000 and accessible range

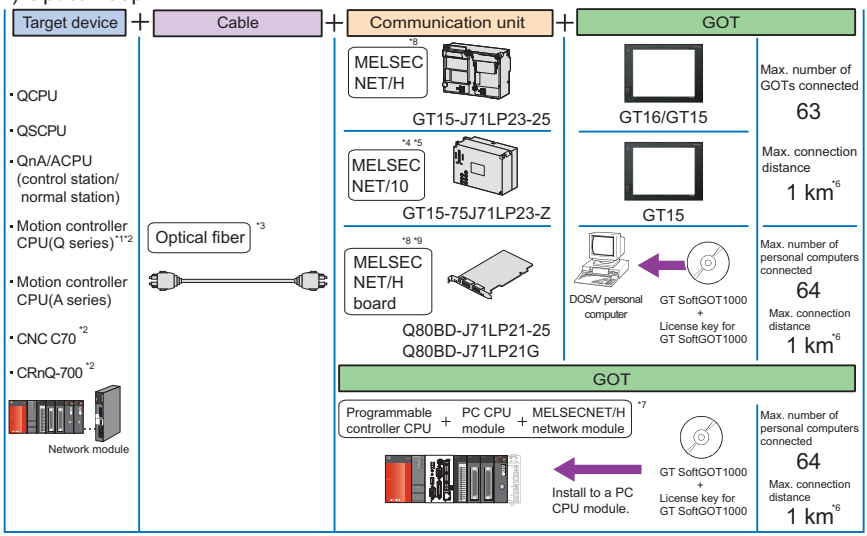
→ Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)

* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

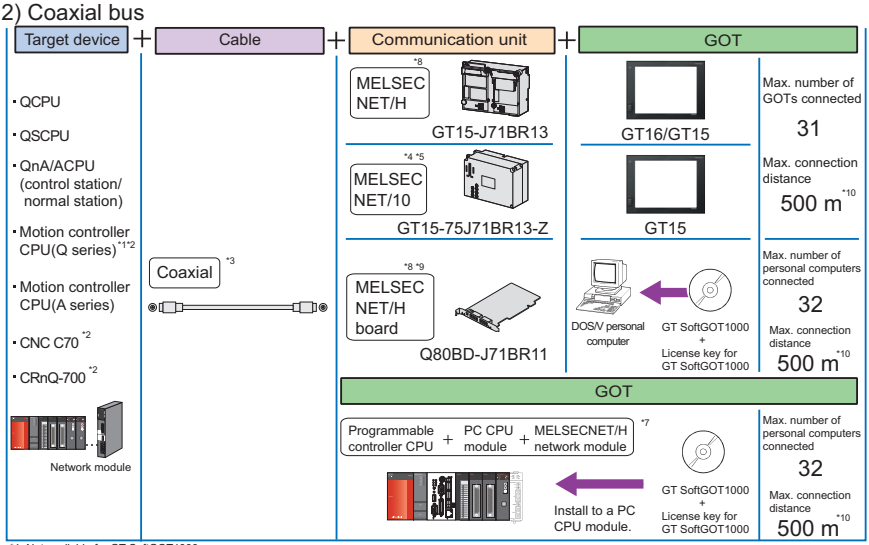
4.1.7 MELSECNET/10 connection

System configuration

1) Optical loop



2) Coaxial bus



*1: Not available for GT SoftGOT1000.
*2: Configure the multiple CPU system.
*3: For the cable type to be used, refer to th MELSECNET/H reference manual.
*4: Cannot be used on GT155[].
*5: Cannot be used when the GOT is connected to Q02UCPU, Q03UDCPU, Q04UDHCPU, Q06UDHCPU, Q13UDHCPU, Q26UDHCPU, Q03UDECPU, Q04UDEHCPU, Q06UDEHCPU, Q13UDEHCPU, Q26UDEHCPU, Q172DCPU, Q173DCPU, CNC C70 or CRnQ-700.
*6: Distance between stations for using the QSI fiber-optic cable.
The overall extension cable length and the length between stations differ depending on the cable type to be used and the total number of stations.
For details, refer to the MELSECNET/H and MELSECNET/10 reference manuals.
*7 Connect the PC CPU module to another programmable controller.
*8: Select the MELSECNET/10 mode for [Communication Setting].
*9: When connecting to the Q redundant system, use the version K or later for the MELSECNET/H board driver (SW0DNC-MNETH-B).
*10: Distance between stations for using the 5C-2V coaxial cable.
The overall extension cable length and the length between stations differ depending on the cable type to be used and the total number of stations.
For details, refer to the MELSECNET/H reference manual.

Available module

CPU series	MELSECNET/H module (NET/10 mode), MELSECNET/10 module	
	Optical loop	Coaxial bus
MELSEC-Q series (Q mode)*11 MELSEC-QS series	QJ71LP21 QJ71LP21-25 QJ71LP21S-25	QJ71BR11
MELSEC-QnA series	AJ71QLP21 AJ71QLP21S A1SJ71QLP21 A1SJ71QLP21S	AJ71QBR11 A1SJ71QBR11
MELSEC-Q series (A mode) MELSEC-A series Motion controller CPU (A series)	AJ71LP21 A1SJ71LP21	AJ71BR11 A1SJ71BR11

*11 Use the CPU and MELSECNET/H network module with the function version B or later.

Precautions

Precautions on system

- Connectable network
  A GOT is connected to the following network systems as a normal station.
  - Optical loop system of MELSECNET/10 network system (programmable controller to programmable controller network)
  - Coaxial bus system of MELSECNET/10 network system (programmable controller to programmable controller network)
- When using MELSECNET/H network module
  When connecting the MELSECNET/H network module to MELSECNET/10 network system, set the network type to the MELSECNET/10 mode.
- Creating network
  For the network where a GOT is connected, create a MELSECNET/H network system (programmable controller to programmable controller network) with the MELSECNET/10 mode or a MELSECNET/10 network system (programmable controller to programmable controller network).
  The GOT cannot be connected to the following networks.
  - MELSECNET/H network system (remote I/O network)
  - MELSECNET/10 network system (remote I/O network)
- Applicable range for monitoring
  A GOT can only monitor a programmable controller on the network where the GOT is connected. Note that the routing parameter setting is required when monitoring the programmable controller CPU on the other network.
  The routing parameter cannot be set with the GT15-75J71LP23-Z and GT15-75J71BR13-Z. Use the GT15-J71LP23-25 or GT15-J71BR13 to set the routing parameter.
- When connecting to QCPU (Q mode)
  For MELSECNET/H network module and QCPU (Q mode), use the function version B or later.
- With the redundant QCPU system, the MELSECNET/H extended mode is not available.
- When using the QSCPU
  The GOT can only read device data and sequence programs by the ladder monitor function in the QSCPU.
  The GOT cannot write any data to the QSCPU.

Precautions on setup

- When changing the switch setting
  When changing the switch setting after installing the MELSECNET/H or MELSECNET/10 communication unit on the GOT, reset the GOT.
- Correctly solder the connector for the coaxial cable.
  Incomplete soldering causes malfunctions.

Other precautions

- For connecting the GOT to the multiple CPU system (Q00CPU, Q01CPU, Q02CPU, Q02HCPU, Q06HCPU, Q12HCPU, and Q25HCPU), use CPUs with the function version B or later.
- The motion controller (A series) cannot be connected to the remote I/O station.
- When connecting to motion controller CPU (Q series)
  - For Q172CPU or Q173CPU
    Use the motion controller CPU with the following production numbers.
    Q172CPU with N******* or later, Q173CPU with M******* or later

  For Q172CPU, Q173CPU, Q172CPUN, or Q173CPUN

  For using the SV13, SV22, and SV43, use a motion controller with the following OS installed.

  SW6RN-SV13Q□: 00H or later, SW6RN-SV22Q□: 00H or later, SW6RN-SV43Q□: 00B or later
- Q172nDCPU, CNC C70, and CRnQ-700 only support MELSECNET/H (programmable controller to programmable controller network).
  When connecting to MELSECNET/10 (programmable controller to programmable controller network), set MELSECNET/H (programmable controller to programmable controller network) to the MELSECNET/10 mode.

Related Manuals

- For details of system configuration and connection cable
- For precautions and restrictions
- For outlined procedure and checking of MELSECNET/10 connection

➤ Chapter 6 in GOT1000 Series Connection Manual (SH-080532ENG)

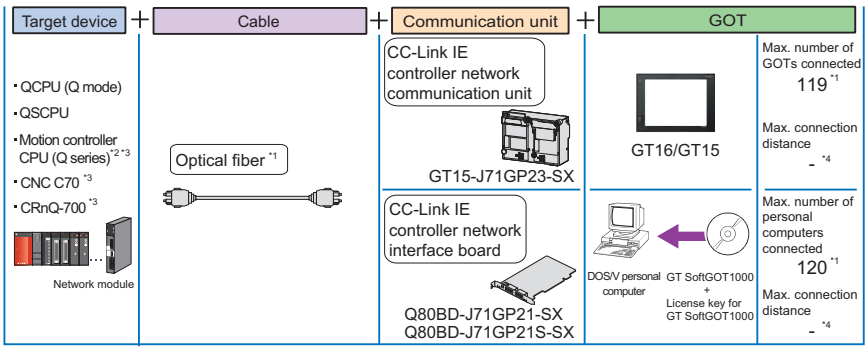
- For controllers that can be monitored by GOT and accessible range

➤ Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)

* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

4.1.8 CC-Link IE controller network connection

System configuration



*1: For the system configuration of the target device such as connectable CPU type and version, version restrictions of the CC-Link IE controller network module, cable, and the number of GOTs connected, refer to CC-Link IE Controller Network Reference Manual.
*2: GT SoftGOT1000 is not available.
*3: Configure the multiple CPU system.
*4: The overall extension cable length and the length between stations differ depending on the cable type to be used and the total number of stations.
For details, refer to CC-Link IE Controller Network Reference Manual.

Available module

CPU series	CC-Link IE controller network module
MELSEC-Q series (Q mode) MELSEC-QS series	QJ71GP21-SX QJ71GP21S-SX

Precautions

Precautions on system

- Applicable range for monitoring
  A GOT can only monitor a programmable controller on the network where the GOT is connected. Note that the routing parameter setting is required when monitoring the programmable controller CPU on the other network.
- When using the QSCPU
  The GOT can only read device data and sequence programs by the ladder monitor function in the QSCPU.
  The GOT cannot write any data to the QSCPU.

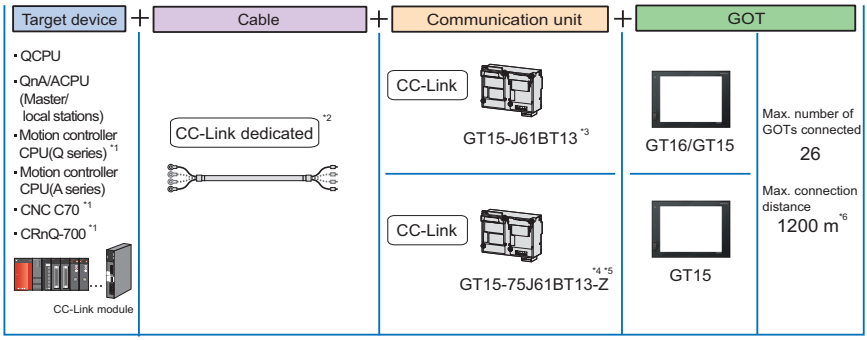
Related Manuals

• For details of system configuration and connection cable • For precautions and restrictions • For outlined procedure and checking of CC-Link IE controller network connection	➤	Chapter 7 in GOT1000 Series Connection Manual (SH-080532ENG)
• For controllers that can be monitored by GOT and accessible range	➤	Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)
• For connection method with GT SoftGOT1000	➤	Chapter 2 in GT SoftGOT1000 Version2 Operating Manual (SH-080602ENG)
• For controllers that can be monitored by GT SoftGOT1000 and accessible range	➤	Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)

* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

4.1.9 CC-Link connection (intelligent device station)

System configuration



*1: Configure the multiple CPU system.
*2: For the specifications and inquiries of the CC-Link dedicated cable, refer to the following website.
CC-Link Partner Association website: http://www.cc-link.org/eng/t_html/top.html
*3: For connection on the CC-Link network system Ver.2. For connection on the CC-Link network system Ver.1, set the mode to Ver.1 in [Communication Setting].
*4: Cannot be used on GT155□.
*5: Cannot be used when the GOT is connected to Q02UCPU, Q03UDCPU, Q04UDHCPU, Q06UDHCPU, Q13UDHCPU, Q26UDHCPU, Q03UDECPU, Q04UDEHCPU, Q06UDEHCPU, Q13UDEHCPU, Q26UDEHCPU, Q172DCPU, Q173DCPU, CNC C70 or CRnQ-700.
*6: When the CC-Link dedicated cable of 156kbps is used
The maximum overall extension cable length and the cable length between stations differ depending on the cable type to be used or others.

Available module

CPU series	CC-Link module
MELSEC-Q series (Q mode)	QJ61BT11 QJ61BT11N*7
MELSEC-QnA series	AJ61QBT11 A1SJ61QBT11
MELSEC-Q series (A mode) MELSEC-A series Motion controller CPU (A series)	AJ61BT11 A1SJ61BT11

*7 Use the model applicable to the CC-Link network system Ver.2 or the CC-Link network system Ver.1 with Ver.2.

Precautions

Precautions on system

- When using cyclic transmission
  (1) I/O signals from/to master station
  Do not turn on reserved output signals among output signals from the master station to a GOT (remote output: RY).
  When the reserved output signals are turned on, the programmable controller system may malfunction.
  (2) Applicable range for monitoring
  Applicable ranges for monitoring remote I/O (RX, RY) and remote register (RWr, RWw) differ depending on the master station mode of the CC-Link network system.

Mode of master station	Availability of monitoring	
	Information of CC-Link Ver.1 compatible station	Information of CC-Link Ver.2 compatible station
Remote network mode	○	–
Remote network ver.1 mode	○	–
Remote network ver.2 mode	○	○*1
Remote network additional mode	○	○*1

○ : Monitoring enabled, – : Creating system disabled
*1 Available only for using GT15-J61BT13 type CC-Link communication unit.

- When using transient transmission
  (1) CC-Link module on target station
  When using transient transmission to communicate with the following CC-Link modules, mount the CC-Link module with the function version B and the software version J or later on a programmable controller.
  When communicating with the CC-Link module with the function version A and the software version I or earlier, only the cyclic transmission is available.
    • AJ61BT11 • A1SJ61BT11
    • AJ61QBT11 • A1SJ61QBT11
  (2) Accessible range for monitoring
  A GOT can access a programmable controller CPU with the CC-Link module set as the master or local station. The GOT cannot access other networks via the CC-Link module.
- Starting GOT with CC-Link connection (intelligent device station)
  When the CC-Link connection (intelligent device station) is used, the data link starts in about 10 minutes after starting the GOT.

Precautions on setup

- When changing the switch setting after installing the GT15-75J65BT13-Z type CC-Link communication unit on a GOT, reset the GOT.
- Setting [Network parameters] of GX Developer
  • When [Mode] of the CC-Link module is set to [Remote net (Ver.2 mode)], [Remote station points] can be set. The [Remote station points] setting is a setting for the remote I/O station. For a GOT, use the default value (32 points).
  • Set the station information setting to [Ver.1 Intelligent device station] when [Mode] of the CC-Link module is set to [Remote net (Ver.2 mode)] or [Remote net(Additional mode)].

Other precautions

- When connecting to motion controller CPU (Q series)
  - For Q172CPU or Q173CPU
    Use the motion controller CPU with the following production numbers.
    Q172CPU with N******* or later, Q173CPU with M******* or later
  - For Q172CPU, Q173CPU, Q172CPUN, or Q173CPUN
    For using the SV13, SV22, and SV43, use a motion controller with the following OS installed.
    SW6RN-SV13Q□: 00H or later, SW6RN-SV22Q□: 00H or later, SW6RN-SV43Q□: 00B or later
- For connecting the GOT to the multiple CPU system (Q00CPU, Q01CPU, Q02CPU, Q02HCPU, Q06HCPU, Q12HCPU, and Q25HCPU), use CPUs with the function version B or later.
- When an error related to the network occurs as the system alarm
  When an error related to the network occurs as the system alarm with the CC-Link connection (intelligent device station), the displayed system alarm cannot be erased even though the error factor is removed. Restart a GOT to erase the system alarm.

Related Manuals

- For details of system configuration and connection cable
- For precautions and restrictions
- For outlined procedure and checking of CC-Link connection

Chapter 8 in GOT1000 Series Connection Manual (SH-080532ENG)

- For controllers that can be monitored by GOT and accessible range

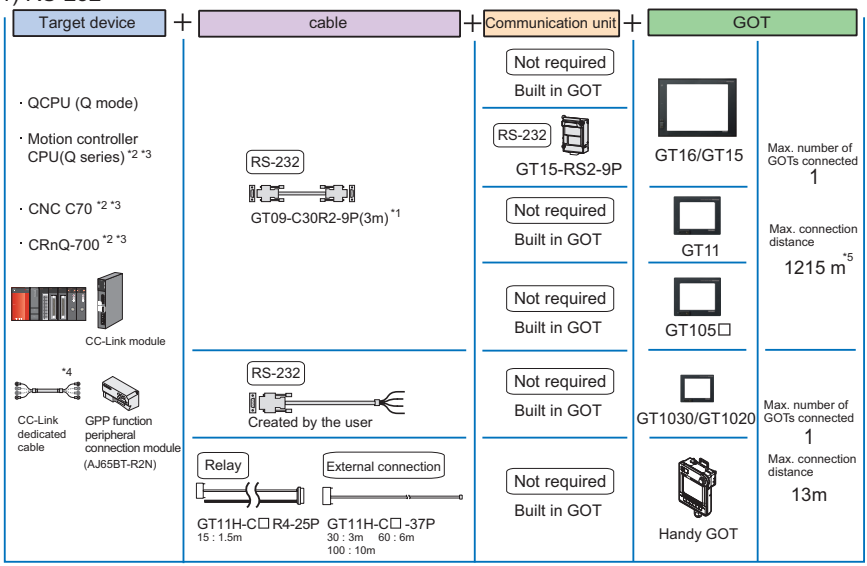
Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)

* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

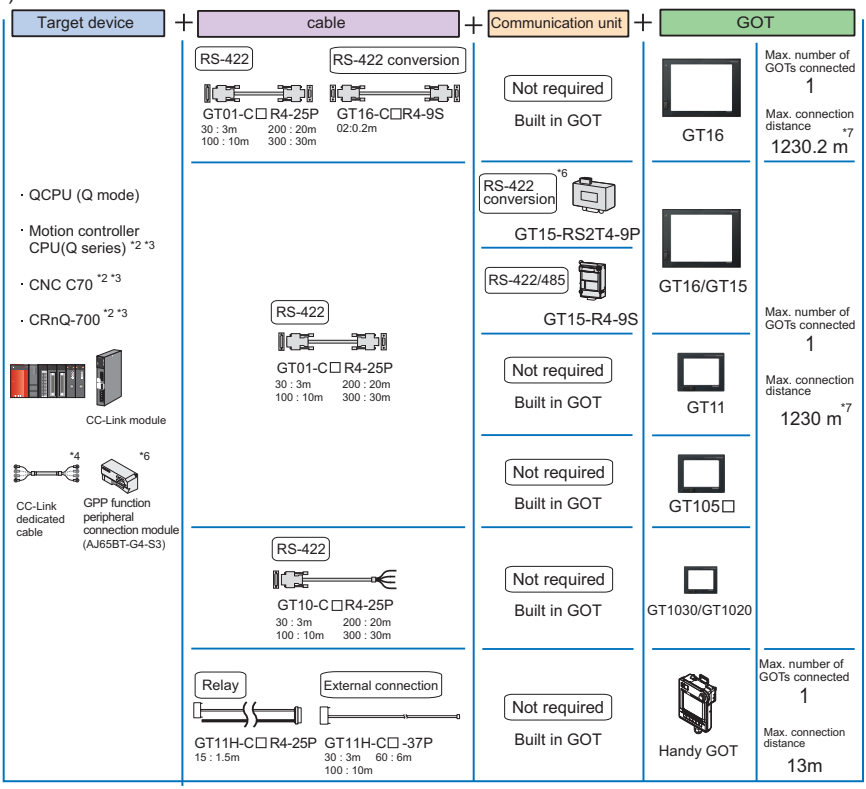
MEMO

System configuration

1) RS-232



2) RS-422



*1: Recommended Product. Purchase the cable from Mitsubishi Electric System & Service Co., Ltd.
*2: Configure the multiple CPU system.
*3: Available only for GT16, GT15, GT11, and Handy GOT.
*4: For the specifications and inquiries of the CC-Link dedicated cable, refer to the following website.
CC-Link Partner Association website: http://www.cc-link.org/eng/t_html/top.html
*5: When the CC-Link dedicated cable of 156Kbps (1200m) and the RS-232 cable (15m) are used.
*6: Use the GT15-R4-9S for GT155□.
*7: When the CC-Link dedicated cable of 156Kbps (1200m) and the RS-422 cable (30m) are used.

The GOT model to be used differs depending on the connection type.

Series		Connection type	GOT model to be used
GT11		RS-232 or RS-422 connections	GT115□-Q□BD
		Bus connection	GT115□-Q□BDQ, GT115□-Q□BDA
	Handy GOT	RS-232 or RS-422 connections	GT115□HS-Q□BD
GT10	GT105□	RS-232 or RS-422 connections	GT105□-Q□BD
	GT1030 GT1020	RS-232 connection	GT1030-LBD2/GT1030-LBDW2, GT1020-LBD2/GT1020-LBDW2
		RS-422 connection	GT1030-LBD/GT1030-LBDW, GT1020-LBD/GT1020-LBDW, GT1020-LBL/GT1020-LBLW (For GT1020-LBL/GT1020-LBLW, MELSEC-FXCPU connection is available only.)

Available module*8

CPU series	CC-Link module	GPP function peripheral connection module
MELSEC-Q series (Q mode)	QJ61BT11 QJ61BT11N	AJ65BT-R2N AJ65BT-G4-S3

*8 GT11 and GT10 can monitor the master station only.

Precautions

Precautions on system

- AJ65BT-G4 cannot be connected to a GOT.

Precautions on setup

- Setting [Network parameters] of GX Developer
  - When [Mode] of the CC-Link module is set to [Remote net (Ver.2 mode)], [Remote station points] can be set. The [Remote station points] setting is a setting for the remote I/O station. For a GOT, use the default value (32 points).
  - Set the station information setting to [Ver.1 Intelligent device station] when [Mode] of the CC-Link module is set to [Remote net (Ver.2 mode)] or [Remote net(Additional mode)].

Other precautions

- When connecting to motion controller CPU (Q series)
  - For Q172CPU or Q173CPU
    Use the motion controller CPU with the following production numbers.
    Q172CPU with N******* or later, Q173CPU with M******* or later
  - For Q172CPU, Q173CPU, Q172CPUN, or Q173CPUN
    For using the SV13, SV22, and SV43, use a motion controller with the following OS installed.
    SW6RN-SV13Q□: 00H or later, SW6RN-SV22Q□: 00H or later, SW6RN-SV43Q□: 00B or later
- For connecting the GOT to the multiple CPU system (Q00CPU, Q01CPU, Q02CPU, Q02HCPU, Q06HCPU, Q12HCPU, and Q25HCPU), use CPUs with the function version B or later.
  For connecting the GOT to the Q17nDCPU, CNC C70, and CRnQ-700, set the system to the CC-Link network system Ver.2.

Related Manuals

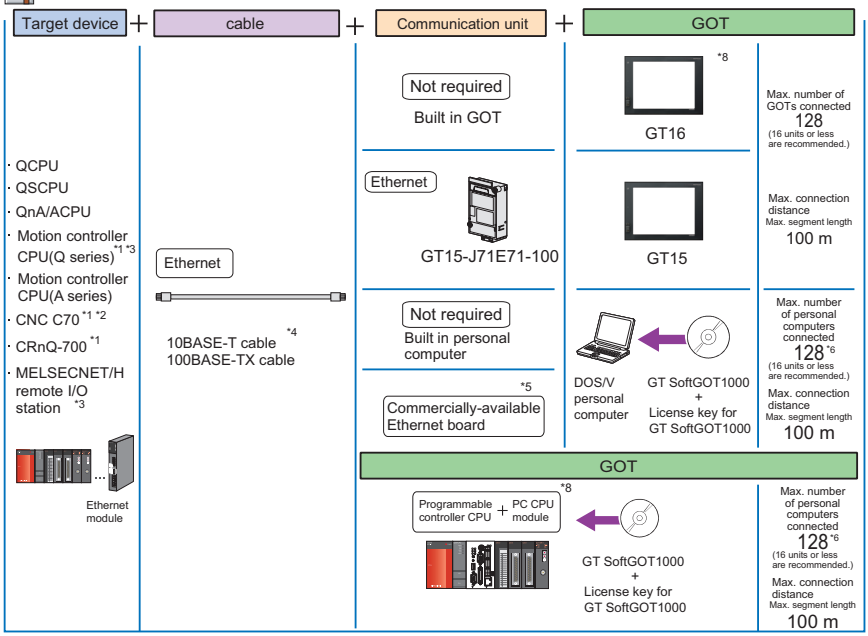
• For details of system configuration and connection cable • For precautions and restrictions • For outlined procedure and checking of CC-Link connection	Chapter 9 in GOT1000 Series Connection Manual (SH-080532ENG)
• For controllers that can be monitored by GOT and accessible range	Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)
• For connection method with Handy GOT	Chapter 10 in Handy GOT User's Manual (JY997D20101)

* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

MEMO

4.1.11 Ethernet connection

System configuration



*1: Configure the multiple CPU system.
*2: Connecting to Display I/F
*3: GT SoftGOT1000 is not available.
*4: Use a cable that supports an Ethernet module and Ethernet board/card to be used.
*5: For available Ethernet boards/cards, refer to the following page.
*6: The number of total GT SoftGOT 1000 running in personal computer is included.
*7: Connect the PC CPU module to another programmable controller.
*8: When connecting GT16 to an equipment that meets the 10BASE (-T/2/5) standard, use the switching hub and operate in an environment where 10Mbps and 100Mbps can be mixed.

Available module

CPU series	Ethernet module*9	
MELSEC-Q series (Q mode) MELSEC-QS series	QJ71E71-100 QJ71E71-B5 QJ71E71-B2 QJ71E71	
MELSEC-QnA series	AJ71QE71N3-T AJ71QE71N-B5 AJ71QE71N-B2 AJ71QE71N-T AJ71QE71N-B5T AJ71QE71 AJ71QE71-B5	A1SJ71QE71N3-T A1SJ71QE71N-B5 A1SJ71QE71N-B2 A1SJ71QE71N-T A1SJ71QE71N-B5T A1SJ71QE71-B5 A1SJ71QE71-B2
MELSEC-Q series (A mode) MELSEC-A series Motion controller CPU (A series)	AJ71E71N3-T AJ71E71N-B5 AJ71E71N-B2 AJ71E71N-T AJ71E71N-B5T AJ71E71-S3	A1SJ71E71N3-T A1SJ71E71N-B5 A1SJ71E71N-B2 A1SJ71E71N-T A1SJ71E71N-B5T A1SJ71E71-B5-S3 A1SJ71E71-B2-S3

*9 When the A series Ethernet module is used for the QnACPU, the devices that can be monitored are only devices with the same name as the devices in the device range of the AnACPU.
Note that the following devices cannot be monitored.
- Devices newly added to the QnACPU
- Latch relays (L) and step relays (S)
(For the QCPU/QnACPU, the latch relay (L) and step relay (S) are different from the internal relay (M). However, the internal relay is accessed even if the latch relay or the step relay is specified.)
- File register (R)

Available Ethernet board/card for GT SoftGOT1000

Manufacturer	Model	Remark
3Com Corporation	EthernetLink Ⅲ LAN PC Card	Ethernet board/card
-	Ethernet board included in personal computer as standard	Ethernet board

Precautions

Precautions on system

- The target device of an Ethernet cable differs depending on the Ethernet network system configuration to be used.
Connect the cable to the system devices, including Ethernet modules, hubs, and transceivers, according to the Ethernet network system to be used.
- Communication via network system
A GOT cannot access a programmable controller on other network via a programmable controller (the network module, Ethernet module, and others) on the network where the GOT is connected.
- When connecting to the QnA(S)CPU type
For the Ethernet module (QnA series) and programmable controller CPU (QnA/QnASCPU types), use the function version B or later.
- When connecting multiple network devices (including a GOT) to the same segment
When multiple network devices (including a GOT) are connected to the same segment, the network load may increase, and the communication speed may slow down between the GOT and a programmable controller. The following actions can improve the communication performance.
  - Use a switching hub.
  - Use the high-speed 100BASE-TX (100Mbps).
  - Reduce the GOT monitoring points.
- The motion controller (A series) cannot be connected to the remote I/O station.
- Applicable range for monitoring
A GOT can monitor a programmable controller on the network where the GOT is connected and on the other networks. The routing parameter setting is required when monitoring a programmable controller CPU on the other networks.
- When using the QSCPU
The GOT can only read device data and sequence programs by the ladder monitor function in the QSCPU.
The GOT cannot write any data to the QSCPU.

Other precautions

- When connecting to motion controller CPU (Q series)
  - For Q172CPU or Q173CPU
  Use the motion controller CPU with the following production numbers.
  Q172CPU with N******* or later, Q173CPU with M******* or later
  - For Q172CPU, Q173CPU, Q172CPUN, or Q173CPUN
  For using the SV13, SV22, and SV43, use a motion controller with the following OS installed.
  SW6RN-SV13Q□: 00H or later, SW6RN-SV22Q□: 00H or later, SW6RN-SV43Q□: 00B or later
- For connecting the GOT to the multiple CPU system (Q00CPU, Q01CPU, Q02CPU, Q02HCPU, Q06HCPU, Q12HCPU, and Q25HCPU), use CPUs with the function version B or later.
- When the A series Ethernet module is used for the QnACPU, the QnACPU cannot be monitored with GT SoftGOT1000.

Related Manuals

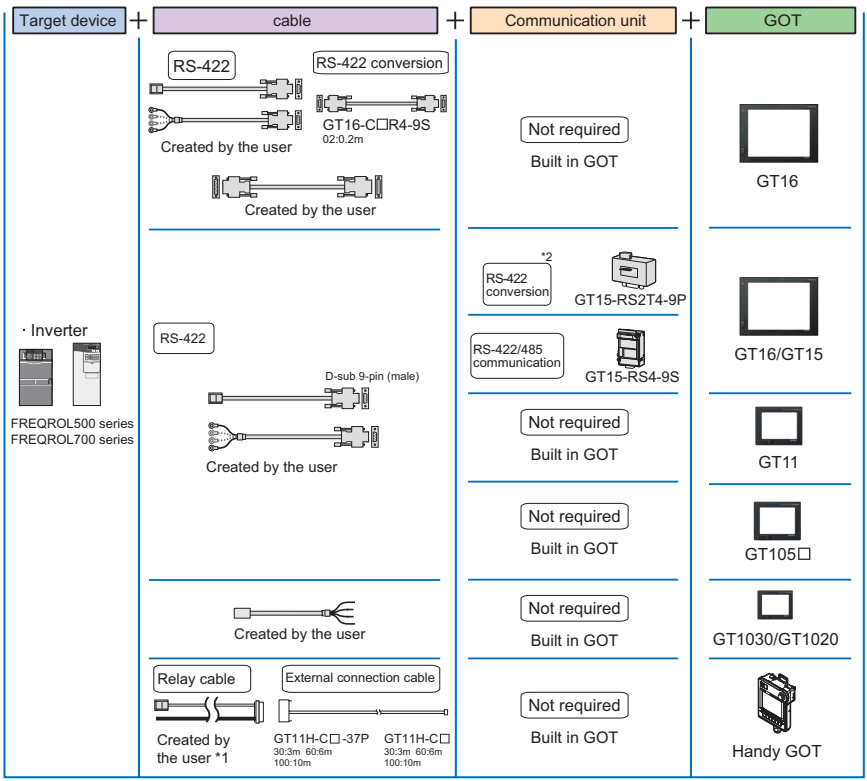
• For details of system configuration and connection cable • For precautions and restrictions • For outlined procedure and checking of Ethernet connection	➤	Chapter 10 in GOT1000 Series Connection Manual (SH-080532ENG)
• For controllers that can be monitored by GOT and accessible range	➤	Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)
• For connection method with GT SoftGOT1000	➤	Chapter 2 in GT SoftGOT1000 Version2 Operating Manual (SH-080602ENG)
• For controllers that can be monitored by GT SoftGOT1000 and accessible range	➤	Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)

* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

MEMO

4.2.1 Inverter connection

System configuration



*1: When using GT11H-C□-37P
*2: Use GT15-RS4-9S for using GT155□.

Connectable models

Model	RS-422	RS-232
FREQROL-S500/S500E	○	×
FREQROL-E500	○	×
FREQROL-F500/F500L	○	×
FREQROL-F500J	○	×
FREQROL-A500/A500L	○	×
FREQROL-V500/V500L	○	×
FREQROL-E700	○	×
FREQROL-F700	○	×
FREQROL-A700	○	×

The GOT model to be used differs depending on the connection type.

Series		Connection type	GOT model to be used
GT11		RS-232 or RS-422 connections	GT115□-Q□BD
		Bus connection	GT115□-Q□BDQ, GT115□-Q□BDA
	Handy GOT	RS-232 or RS-422 connections	GT115□HS-Q□BD
GT10	GT105□	RS-232 or RS-422 connections	GT105□-Q□BD
	GT1030 GT1020	RS-232 connection	GT1030-LBD2/GT1030-LBDW2, GT1020-LBD2/GT1020-LBDW2
		RS-422 connection	GT1030-LBD/GT1030-LBDW, GT1020-LBD/GT1020-LBDW, GT1020-LBL/GT1020-LBLW (For GT1020-LBL/GT1020-LBLW, MELSEC-FXCPU connection is available only.)

Precautions

Precautions on system

- Clock setting of GOT
  The inverter does not have the clock function. Even though [Adjust] or [Broadcast] is set for the clock setting, the setting is invalid (not processed).
- Do not change various communication parameters of the inverter with a GOT.
  When the communication parameters of the inverter are changed, the GOT cannot communicate with the inverter.
- Be sure to use GD for the screen switching device and system information device.

Related Manuals

- For details of system configuration and connection cable
- For precautions and restrictions
- For outlined procedure and checking of inverter connection

Chapter 37 in GOT1000 Series Connection Manual (SH-080532ENG)

- For controllers that can be monitored by GOT and accessible range

Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)

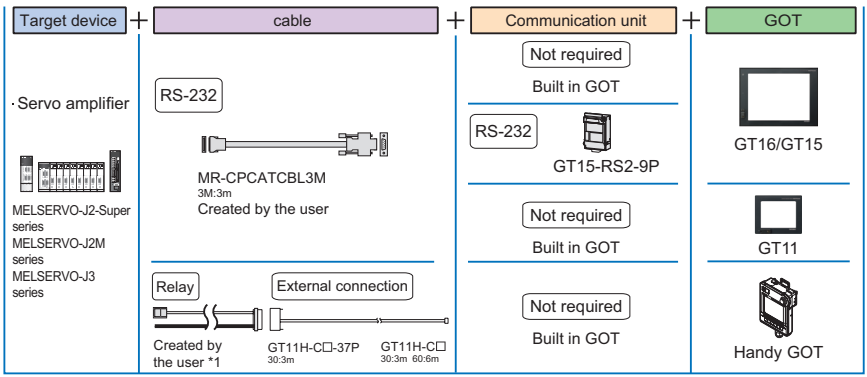
- For connection method with Handy GOT

Chapter 35 in Handy GOT User's Manual (JY997D20101)

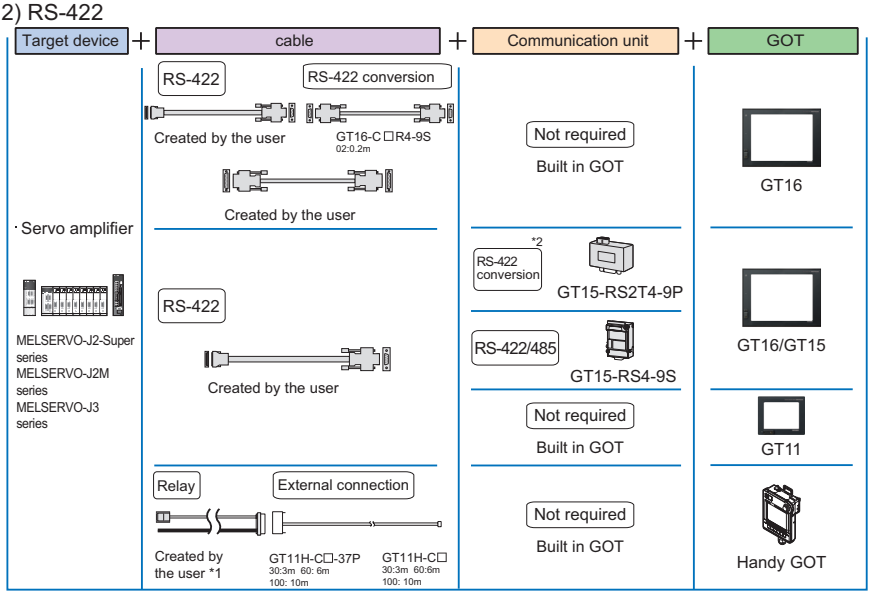
* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

System configuration

1) RS-232



2) RS-422



*1: When using GT11H-C☐-37P
*2 Use GT15-RS4-9S for using GT155☐.

Connectable models

Model		RS-422	RS-232
MELSERVO-J3 series	MR-J3□A	○	○
	MR-J3□T	○	○
MELSERVO-J2-Super series	MR-J2S-□A	○	○
	MR-J2S-□CP	○	○
MELSERVO-J2M series	MR-J2M-P8A	○	○
	MR-J2M□DU	○	○

The GOT model to be used differs depending on the connection type.

Series		Connection type	GOT model to be used
GT11		RS-232 or RS-422 connections	GT115□-Q□BD
		Bus connection	GT115□-Q□BDQ, GT115□-Q□BDA
	Handy GOT	RS-232 or RS-422 connections	GT115□HS-Q□BD

Precautions

Precautions on system

- Clock setting of GOT
  The servo amplifier does not have the clock function. Even though [Adjust] or [Broadcast] is set for the clock setting, the setting is invalid (not processed).

Other precautions

- Test operation of servo amplifier with GOT
  When communication between a GOT and a servo amplifier is aborted for 0.5[ms] or more during the test operation of the servo amplifier, the servo amplifier makes the servo motor decelerate and stop, and then the servo motor locks.
  During the test operation of the servo amplifier, keep the communication between the GOT and servo amplifier executed with monitoring the servo amplifier status and others.

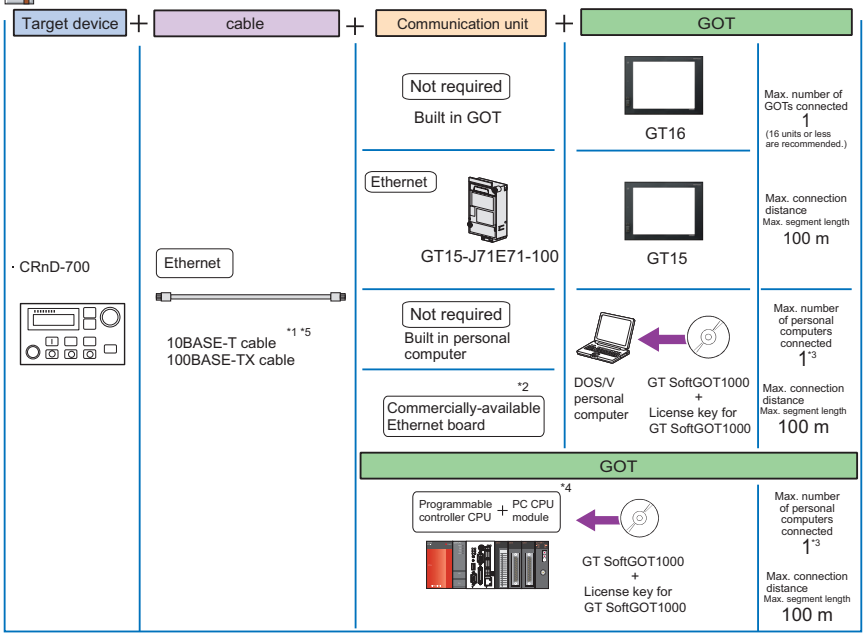
Related Manuals

• For details of system configuration and connection cable • For precautions and restrictions • For outlined procedure and checking of servo amplifier connection	Chapter 38 in GOT1000 Series Connection Manual (SH-080532ENG)
• For controllers that can be monitored by GOT and accessible range	Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)
• For connection method with Handy GOT	Chapter 36 in Handy GOT User's Manual (JY997D20101)

* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

4.2.3 Robot controller connection

System configuration



*1: Use a cable that supports a robot controller and Ethernet board/card to be used.
*2: For available Ethernet boards/cards, refer to the following page.
*3: The number of total GT SoftGOT1000 running in personal computer is included.
*4: Connect the PC CPU module to another programmable controller.
*5: When connecting GT16 to an equipment that meets the 10BASE (-T/2/5) standard, use the switching hub and operate in an environment where 10Mbps and 100Mbps can be mixed.

Available Ethernet board/card for GT SoftGOT1000

Manufacturer	Model	Remark
3Com Corporation	EthernetLink III LAN PC Card	Ethernet board/card
-	Ethernet board included in personal computer as standard	Ethernet board

Precautions

Precautions on system

- The target device of an Ethernet cable differs depending on the Ethernet network system configuration to be used.
  Connect the cable to the system devices, including robot controllers, and hubs, according to the Ethernet network system to be used.
- Communication via network system
  A GOT cannot access a programmable controller on other network via a programmable controller (the network module, Ethernet module, and others) on the network where the GOT is connected.
- When connecting multiple network devices (including a GOT) to the same segment
  When multiple network devices (including a GOT) are connected to the same segment, the network load may increase, and the communication speed may slow down between the GOT and a programmable controller. The following actions can improve the communication performance.
  - Use a switching hub.
  - Use the high-speed 100BASE-TX (100Mbps).
  - Reduce the GOT monitoring points.
- Applicable range for monitoring
  A GOT can monitor a programmable controller on the network where the GOT is connected and on the other networks. The routing parameter setting is required when monitoring a programmable controller CPU on the other networks.

Related Manuals

• For details of system configuration and connection cable • For precautions and restrictions • For outlined procedure and checking of Robot controller connection	Chapter 39 in GOT1000 Series Connection Manual (SH-080532ENG)
• For controllers that can be monitored by GOT and accessible range	Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)
• For connection method with GT SoftGOT1000	Chapter 2 in GT SoftGOT1000 Version2 Operating Manual (SH-080602ENG)
• For controllers that can be monitored by GT SoftGOT1000 and accessible range	Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)

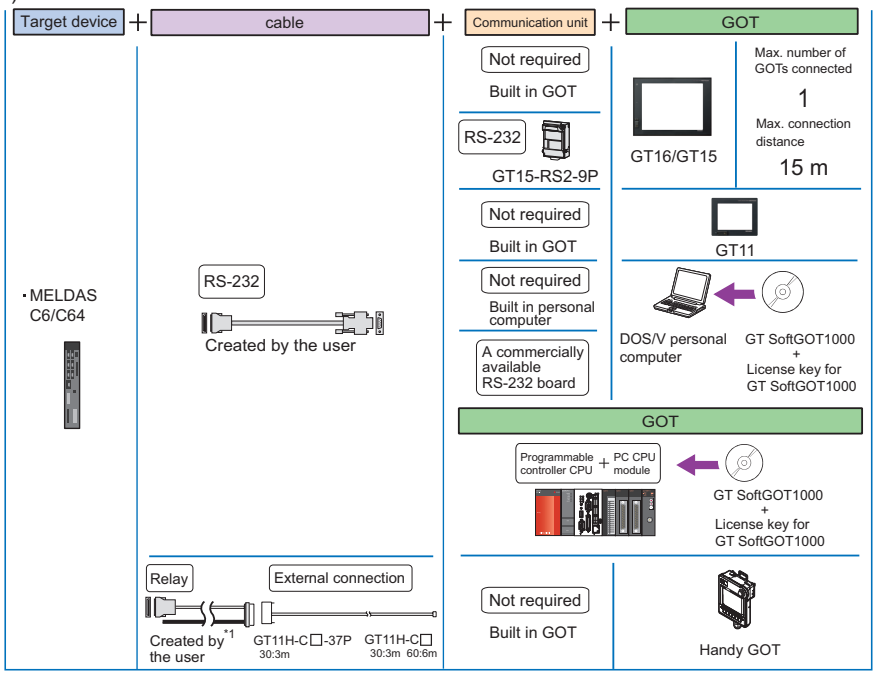
* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

4.2.4 CNC (MELDAS C6/C64) connection

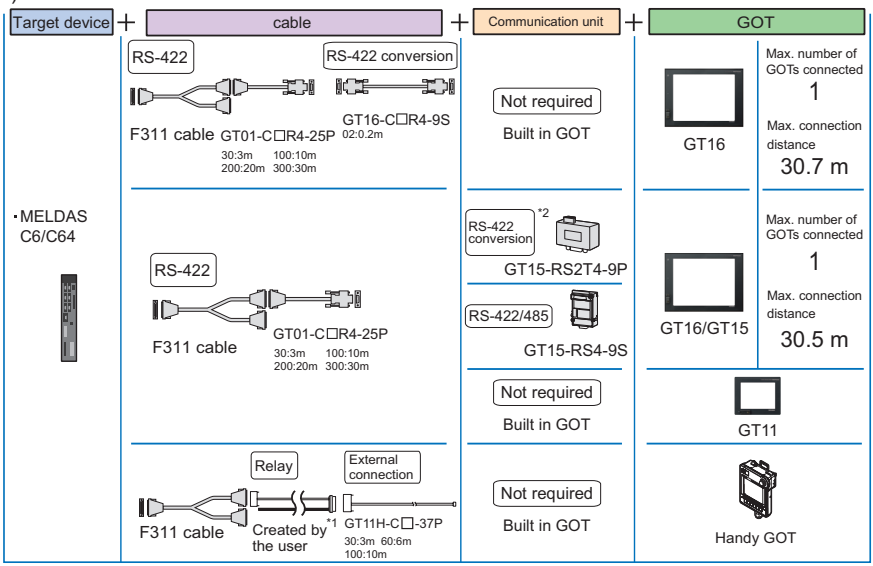
●Direct CPU connection

System configuration

1) RS-232



2) RS-422



*1: Required when using GT11H-C□-37P
*2: Use GT15-RS4-9S for using GT155□.

Connectable models

Series	Model	Connection type		
		Direct CPU connection		
		GT16/GT15	GT11	GT SoftGOT1000
MELDAS C6/C64	FCA C6	○	○	○
	FCA C64	○	○	○

The GOT model to be used differs depending on the connection type.

Series		Connection type	GOT model to be used
GT11		RS-232 or RS-422 connections	GT115□-Q□BD
		Bus connection	GT115□-Q□BDQ, GT115□-Q□BDA
	Handy GOT	RS-232 or RS-422 connections	GT115□HS-Q□BD

Precautions

Precautions on system

- Version of MELDAS C6/C64
  For MELDAS C6/C64, use the NC system software version D0 or later.

Related Manuals

• For details of system configuration and connection cable • For precautions and restrictions • For outlined procedure and checking of CNC connection	Chapter 40 in GOT1000 Series Connection Manual (SH-080532ENG)
• For controllers that can be monitored by GOT and accessible range	Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)
• For connection method with Handy GOT	Chapter 37 in Handy GOT User's Manual (JY997D20101)
• For connection method with GT SoftGOT1000	Chapter 2 in GT SoftGOT1000 Version2 Operating Manual (SH-080602ENG)
• For controllers that can be monitored by GT SoftGOT1000 and accessible range	Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)

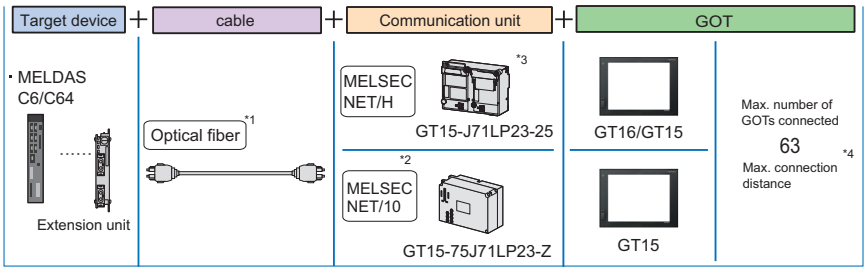
* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

MEMO

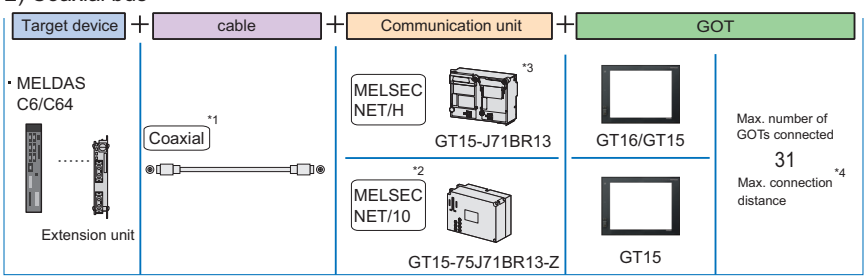
●MELSECNET/10 connection

System configuration

1) Optical loop



2) Coaxial bus



*1: For the cable type to be used, refer to th MELSECNET/H reference manual.
*2: Cannot be used on GT155□.
*3: Select the MELSECNET/10 mode in [Communication Settings].
*4: The overall distance and the distance between stations vary depending on the cable types to be used and the total number of stations.
For details, refer to the following manuals.
・MELDAS C6/C64 CONNECTION AND MAINTENANCE MANUAL
・MELDAS C6/C64 NETWORK MANUAL

Connectable models

Series	Model	Connection type		
		MELSECNET/10 connection		
		GT16/GT15	GT11	GT SoftGOT1000
MELDAS C6/C64	FCA C6	○	×	×
	FCA C64	○	×	×

Available module for MELDAS C6/C64 connection

Series	MELSECNET/H module (NET/10 mode), MELSECNET/10 module	
	Optical loop	Coaxial bus
MELDAS C6/C64	FCU6-EX879	FCU6-EX878

Precautions

Precautions on system

- Connectable network
  A GOT is connected to the following network systems as a normal station.
  - Optical loop system of MELSECNET/10 network system (programmable controller to programmable controller network)
  - Coaxial bus system of MELSECNET/10 network system (programmable controller to programmable controller network)
- When using MELSECNET/H network module
  When connecting the MELSECNET/H network module to MELSECNET/10 network system, set the network type to the MELSECNET/10 mode.
- Creating network
  For the network including a GOT, create a MELSECNET/H network system (programmable controller to programmable controller network) with the MELSECNET/10 mode or a MELSECNET/10 network system (programmable controller to programmable controller network).
  The GOT cannot be connected to the following networks.
  - MELSECNET/H network system (remote I/O network)
  - MELSECNET/10 network system (remote I/O network)
- Applicable range for monitoring
  A GOT can only monitor a programmable controller and CNC on the network where the GOT is connected. Note that the routing parameter setting is required when monitoring the programmable controller CPU and CNC on the other networks.
  The routing parameter cannot be set with the GT15-75J71LP23-Z and GT15-75J71BR13-Z. Use the GT15-J71LP23-25 or GT15-J71BR13 to set the routing parameter.
- Version of CNC
  For MELDAS C6/C64, use the NC system software version D0 or later.
- Starting GOT with CNC connection (MELSECNET/10 connection)
  When the CNC connection (MELSECNET/10 connection) is used, the data link starts in about 10 minutes after starting the GOT.
- When an error related to the network occurs as the system alarm
  When an error related to the network occurs as the system alarm with CNC connection (MELSECNET/10 connection), the displayed system alarm cannot be erased even though the error factor is removed. Restart a GOT to erase the system alarm.

Precautions on setup

- When changing the switch setting
  When changing the switch setting after installing the MELSECNET/H or MELSECNET/10 communication unit on the GOT, reset the GOT.
- Correctly solder the connector for the coaxial cable.
  Incomplete soldering causes malfunctions.

Related Manuals

- For details of system configuration and connection cable
- For precautions and restrictions
- For outlined procedure and checking of MELSECNET/10 connection

Chapter 40 in GOT1000 Series Connection Manual (SH-080532ENG)

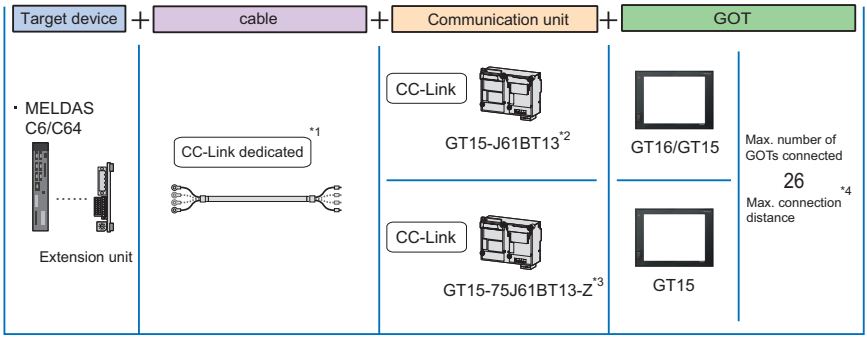
- For controllers that can be monitored by GOT and accessible range

Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)

* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

●CC-Link (intelligent device station) connection

System configuration



*1: For the specifications and inquiries of the CC-Link dedicated cable, refer to the following website.
CC-Link Partner Association website: http://www.cc-link.org/eng/t_html/top.html

*2: For connection on the CC-Link network system Ver.2. For connection on the CC-Link network system Ver.1, set the mode to Ver.1 in [Communication Setting].

*3: Cannot be used on GT155 □.

*4: The overall distance and the distance between stations vary depending on the cable types to be used and the total number of stations.
For details, refer to the following manuals.
・MELDAS C6/C64 CONNECTION AND MAINTENANCE MANUAL
・MELDAS C6/C64 NETWORK MANUAL

Connectable models

Series	Model	Connection type		
		CC-Link (intelligent device station) connection		
		GT16/GT15	GT11	GT SoftGOT1000
MELDAS C6/C64	FCA C6	○	×	×
	FCA C64	○	×	×

Available module for MELDAS C6/C64 connection

Series	CC-Link module
MELDAS C6/C64	FCU6-HR865

Precautions

Precautions on system

- When using cyclic transmission
  (1) I/O signals from/to master station
  Do not turn on reserved output signals among output signals from the master station to a GOT (remote output: RY).
  When the reserved output signals are turned on, MELDAS (C6/C64) may malfunction.
  (2) CC-Link mode
  The CNC is not applicable to the CC-Link network system Ver.2.
- When using transient transmission
  (1) Accessible range for monitoring
  A GOT can access a programmable controller CPU with the CC-Link module set as the master or local station. The GOT cannot access other networks via the CC-Link module.
- Starting GOT with CC-Link connection (intelligent device station)
  When the CC-Link connection (intelligent device station) is used, the data link starts in about 10 minutes after starting the GOT.
- Version of MELDAS C6/C64
  For MELDAS C6/C64, use the NC system software version D0 or later.

Precautions on setup

- When changing the switch setting after installing the GT15-75J61BT13-Z type CC-Link communication unit on a GOT, reset the GOT.
- Setting [Network parameters] of GX Developer
  - When [Mode] of the CC-Link module is set to [Remote net (Ver.2 mode)], [Remote station points] can be set. The [Remote station points] setting is a setting for the remote I/O station. For a GOT, use the default value (32 points).
  - Set the station information setting to [Ver.1 Intelligent device station] when [Mode] of the CC-Link module is set to [Remote net (Ver.2 mode)] or [Remote net (Additional mode)].

Other precautions

- When an error related to the network occurs as the system alarm
  When an error related to the network occurs as the system alarm with the CC-Link connection (intelligent device station), the displayed system alarm cannot be erased even though the error factor is removed. Restart a GOT to erase the system alarm.

Related Manuals

- For details of system configuration and connection cable
- For precautions and restrictions
- For outlined procedure and checking of CC-Link connection

Chapter 40 in GOT1000 Series Connection Manual (SH-080532ENG)

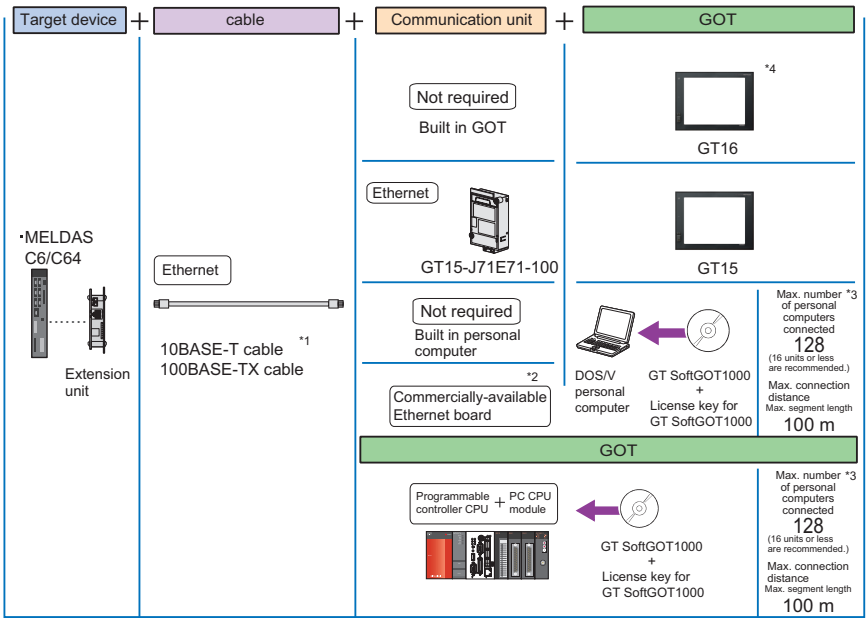
- For controllers that can be monitored by GOT and accessible range

Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)

* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

●Ethernet connection

System configuration



*1: Use a cable that supports an Ethernet module and Ethernet board/card to be used.
*2: For available Ethernet boards/cards, refer to the following page.
*3: The number of total GT SoftGOT 1000 running in personal computer is included.
*4: When connecting GT16 to an equipment that meets the 10BASE (-T/2/5) standard, use the switching hub and operate in an environment where 10Mbps and 100Mbps can be mixed.

Connectable models

Series	Model	Connection type		
		Ethernet connection		
		GT16/GT15	GT11	GT SoftGOT1000
MELDAS C6/C64	FCA C6	○	×	×
	FCA C64	○	×	×

Available Ethernet board/card for GT SoftGOT1000

Manufacturer	Model	Remarks
3Com Corporation	EthernetLink Ⅲ LAN PC Card	Ethernet board/card
-	Ethernet board included in personal computer as standard	Ethernet board

Available module for MELDAS C6/C64 connection

Series	Ethernet module
MELDAS C6/C64	FCU6-EX875

Precautions

Precautions on system

- The target device of an Ethernet cable differs depending on the Ethernet network system configuration to be used.
  Connect the cable to the system devices, including Ethernet modules, hubs, and transceivers, according to the Ethernet network system to be used.
- Communication via network system
  A GOT cannot access a CNC on other network via a CNC (the network module, Ethernet module, and others) on the network where the GOT is connected.
- When connecting multiple network devices (including a GOT) to the same segment
  When multiple network devices (including a GOT) are connected to the same segment, the network load may increase, and the communication speed may slow down between the GOT and a programmable controller. The following actions can improve the communication performance.
  - Use a switching hub.
  - Use the high-speed 100BASE-TX (100Mbps).
  - Reduce the GOT monitoring points.
- Applicable range for monitoring
  A GOT can only monitor a programmable controller on the network where the GOT is connected. Note that the routing parameter setting is required when monitoring the programmable controller CPU on the other network.
- Version of MELDAS C6/C64
  For MELDAS C6/C64, use the NC system software version D0 or later.

Precautions on setup

- A GOT cannot access a MELDAS (C6/C64) on other network via a MELDAS (C6/C64) (the network module, Ethernet module, and others) on the network where the GOT is connected.
- Connecting Ethernet cable
  Keep a distance between the Ethernet cable and power line or electric power line, and run the Ethernet cable through ferrite cores (included) at positions close to control devices so that the Ethernet cable is not affected by noise.

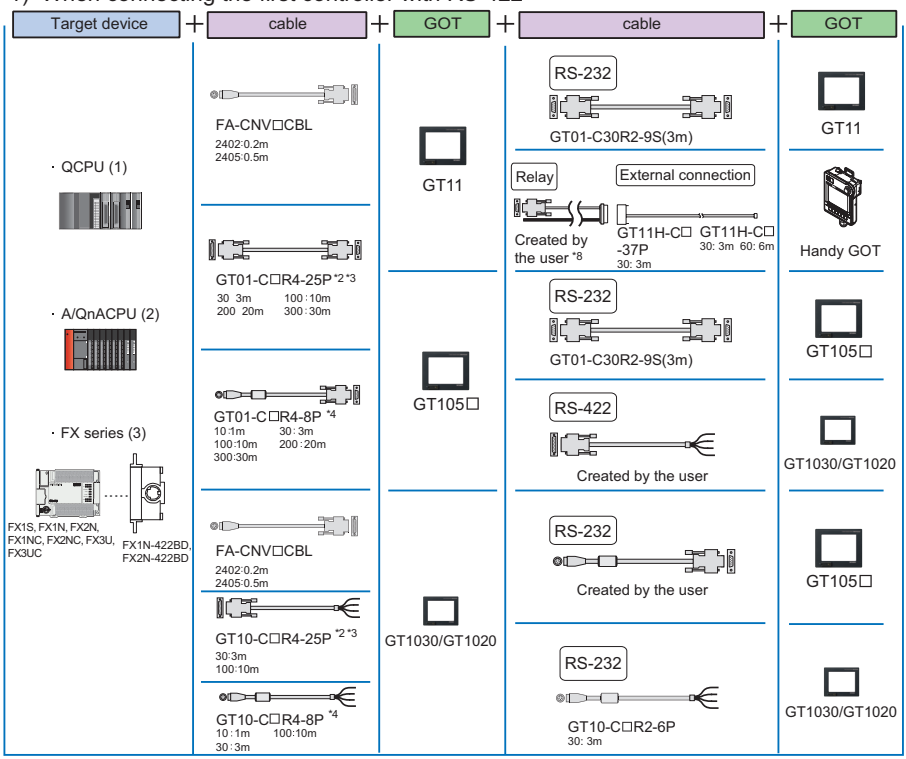
Related Manuals

• For details of system configuration and connection cable • For precautions and restrictions • For outlined procedure and checking of CNC connection	Chapter 40 in GOT1000 Series Connection Manual (SH-080532ENG)
• For controllers that can be monitored by GOT and accessible range	Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)
• For connection method with GT SoftGOT1000	Chapter 2 in GT SoftGOT1000 Version2 Operating Manual (SH-080602ENG)
• For controllers that can be monitored by GT SoftGOT1000 and accessible range	Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)

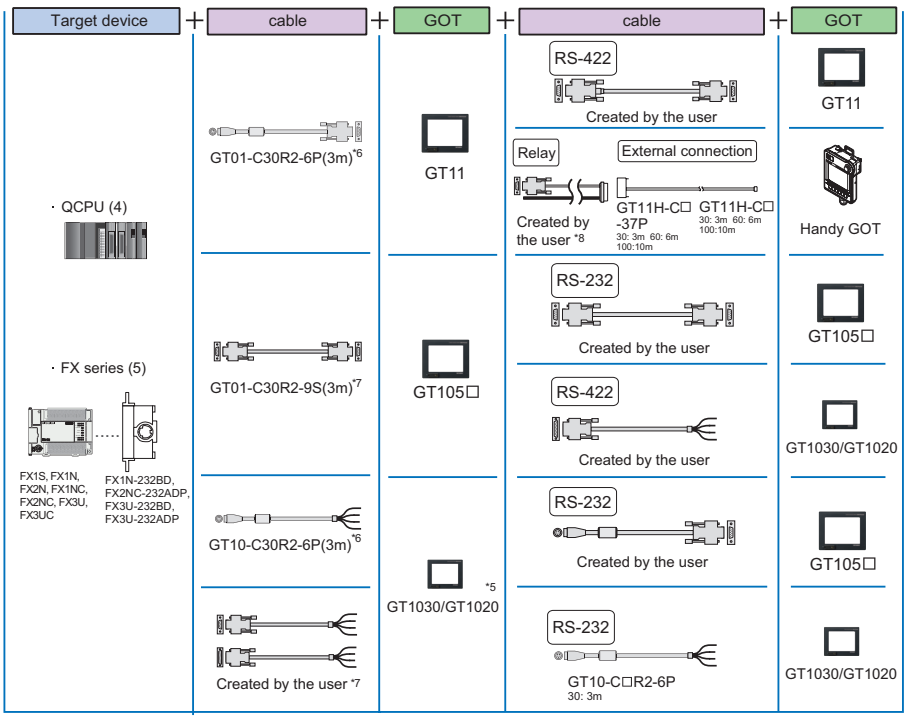
* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

System configuration

1) When connecting the first controller with RS-422 *1



2) When connecting the first controller with RS-232 *1



*1: GT11 and GT10 cannot be connected together.
*2: Used for connecting to (1).
*3: Used for connecting to (2).
*4: Used for connecting to (3).
*5: GT1020-LBL can be connected only to FXCPU.
*6: Used for connecting to (4).
*7: Used for connecting to (5).
*8: Used for using GT11H-C□-37P.

The GOT model to be used differs depending on the connection type.

Series		Connection type	GOT model to be used
GT11		RS-232 or RS-422 connections	GT115□-Q□BD
		Bus connection	GT115□-Q□BDQ, GT115□-Q□BDA
	Handy GOT	RS-232 or RS-422 connections	GT115□HS-Q□BD
GT10	GT105□	RS-232 or RS-422 connections	GT105□-Q□BD
	GT1030 GT1020	RS-232 connection	GT1030-LBD2/GT1030-LBDW2, GT1020-LBD2/GT1020-LBDW2
		RS-422 connection	GT1030-LBD/GT1030-LBDW, GT1020-LBD/GT1020-LBDW, GT1020-LBL/GT1020-LBLW (For GT1020-LBL/GT1020-LBLW, MELSEC-FXCPU connection is available only.)

Precautions

Precautions on system

- When connecting a GOT to the MITSUBISHI programmable controller with the following connection type, the multiple-GT11/GT10 connection function can be used.
  - Direct CPU connection
- GOT communication timing
  Adjust the communication timing as described below so that GOTs communicate with a controller (MITSUBISHI programmable controller) in number order (starting from the first connected GOT) after the GOTs are turned on.
  When the communication is disabled, retry the communication. A communication error occurs when the time-out period passes.
  (1) When turning on GOTs simultaneously
  When it takes a long time to start communication of the second GOT, a communication error may occur.
  For the time that the startup screen is displayed, set the longer time for the second GOT than the first GOT. (Example: First GOT (5 minutes) → Second GOT (10 minutes))
  A GOT does not communicate with a controller during displaying the startup screen.
  For adjusting the time of the startup screen, refer to GT11 User's Manual (JY997D17501C).
  (2) When turning on GOTs respectively
  When the first GOT is turned on sometime after the second GOT is turned on, the communication start of the second GOT delays. Therefore, a communication error may occur on the second GOT. Turn on a controller, the first GOT, and the second GOT, in that order.
- Using the function with FA transparent function
  When connecting multiple GOTs, the FA transparent function cannot be used with connecting a personal computer to the RS-232 interface or USB interface of the GOT.
- Conditions for making GOTs stop monitoring in the system where multiple GOTs are connected
  In the system where multiple GOTs are connected, when the following operations are executed on the first GOT (close to the programmable controller), the first GOT stops monitoring, and the second GOT also stops monitoring.
  When the first GOT restarts monitoring, the second GOT also restarts monitoring.
  (1) When the project data is downloaded/uploaded, or OS is installed with GT Designer2
  (2) When a GOT is set up
- When power-off of a programmable controller occurs in the system where multiple GOTs are connected
  When the power-off of a programmable controller occurs or when the communication between a programmable controller and the first GOT stops because of the communication cable disconnection and others, time-out wait occurs for the communication request from the second GOT to the first GOT. As a result, it takes a long time to restart communications between the programmable controller and the first GOT.

Related Manuals

- For details of system configuration and connection cable
- For precautions and restrictions
- For outlined procedure and checking of multiple-GT11/GT10 connection

→ Chapter 51 in GOT1000 Series Connection Manual (SH-080532ENG)

- For controllers that can be monitored by GOT and accessible range

→ Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)

- For connection method with Handy GOT

→ Chapter 38 in Handy GOT User's Manual (JY997D20101)

* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

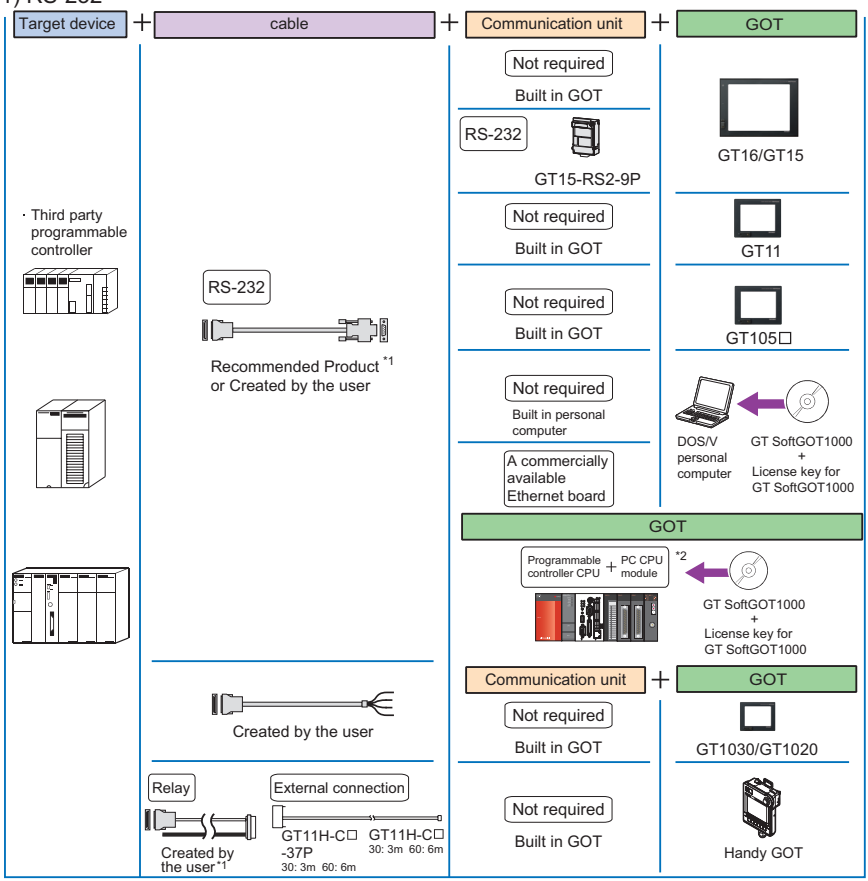
4.3 Third Party Programmable Controller

4.3.1 Connection type

The following shows connection with a third party programmable controller. The available connection type and GOT differ according to the manufacturer. For details, refer to the section for each programmable controller.

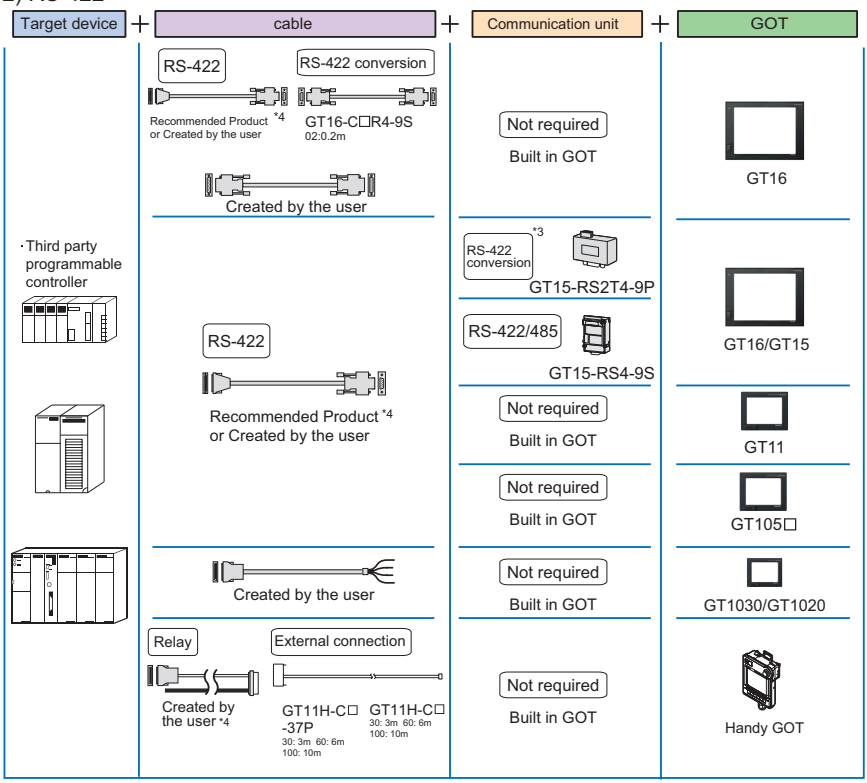
System configuration

1) RS-232



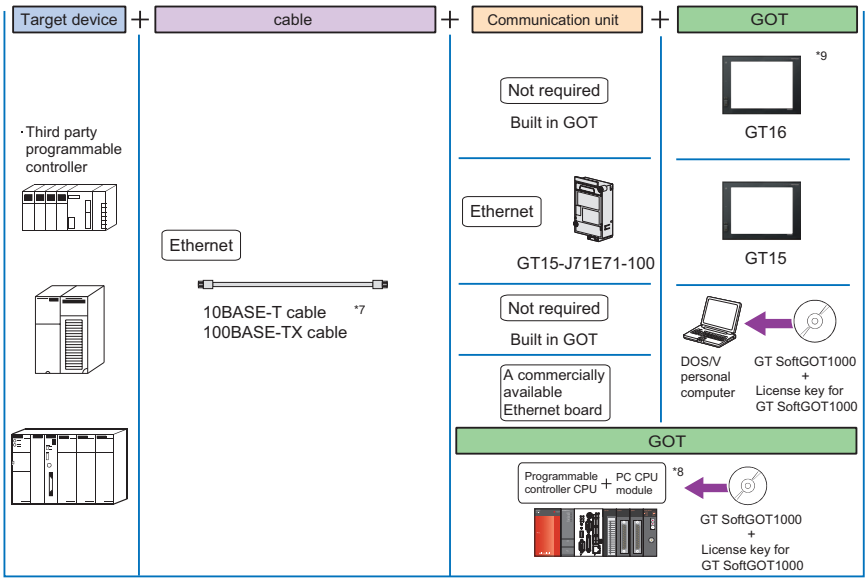
*1: Cables vary depending on the target devices.
For details, refer to 6.EQUIPMENT, SOFTWARE, AND MANUALS and GOT1000 Series Connection Manual.
*2: Used for using GT11H-C□-37P.
*3: Connect the PC CPU module to another programmable controller.

2) RS-422



*4: Cables vary depending on the target devices.
For details, refer to 6.EQUIPMENT, SOFTWARE, AND MANUALS and GOT1000 Series Connection Manual.
*5: Use GT15-RS4-9S for using GT155□.
*6: Used for using GT11H-C□-37P.

3) Ethernet



*7: Use a cable that supports an Ethernet module and Ethernet board/card to be used.
*8: Connect the PC CPU module to another programmable controller.
*9: When connecting GT16 to an equipment that meets the 10BASE (-T/2/5) standard, use the switching hub and operate in an environment where 10Mbps and 100Mbps can be mixed.

4.3.2 OMRON programmable controller

For details of the system configuration, refer to "Connection type" in section 4.3.1.

Connectable GOT

Connectable models

Series	Model	GT16/GT15/GT11/GT10				GT SoftGOT1000			
		Computer link connection		Direct CPU connection		Computer link connection		Direct CPU connection	
		RS-422	RS-232	RS-422	RS-232	RS-422	RS-232	RS-422	RS-232
SYSMAC CPM	CPM1A	×	○	×	×	×	×	×	×
	CPM1				○				○
	CPM2A				×				×
	CPM2C				○				○
SYSMAC CQM1H	CQM1H	○	○	×	○	×	×	×	×
SYSMAC CJ1	CJ1H								
	CJ1G								
	CJ1M								
SYSMAC CP1	CP1H				×				×
	CP1L								
SYSMAC α	C200HX				○				○
	C200HG								
	C200HE				×				×
SYSMAC CS1	CS1H				○				○
	CS1G								
	CS1D								
SYSMAC CVM1/CV	CV500	×	×	○					
	CV1000								
	CV2000								
	CVM1								
-	CQM1			×	○*1				
	C200HS	○	○		×				×
	C200H								
	C1000H								
	C2000H								

*1 CQM1-CPU11 does not have the RS-232 interface and cannot connect to a GOT.

The GOT model to be used differs depending on the connection type.

Series		Connection type	GOT model to be used
GT11		RS-232 or RS-422 connections	GT115□-Q□BD
		Bus connection	GT115□-Q□BDQ, GT115□-Q□BDA
	Handy GOT	RS-232 or RS-422 connections	GT115□HS-Q□BD
GT10	GT105□	RS-232 or RS-422 connections	GT105□-Q□BD
	GT1030 GT1020	RS-232 connection	GT1030-LBD2/GT1030-LBDW2, GT1020-LBD2/GT1020-LBDW2
		RS-422 connection	GT1030-LBD/GT1030-LBDW, GT1020-LBD/GT1020-LBDW, GT1020-LBL/GT1020-LBLW (For GT1020-LBL/GT1020-LBLW, MELSEC-FXCPU connection is available only.)

Available unit for computer link connection

Unit	RS-422	RS-232
Host link unit/ Communication unit/ Communication board	C200H-LK202-V1 C500-LK201-V1 CQM1-SCB41 CJ1W-SCU41 CJ1W-SCU21-V1+CP1W-EXT01 CS1W-SCB41 C200HW-COM03 C200HW-COM06 CP1W-CIF11	C200H-LK201-V1 C500-LK201-V1 CS1W-SCU21 CS1W-SCB21 CS1W-SCB41 CJ1W-SCU21-V1 CJ1W-SCU21-V1+CP1W-EXT01 CJ1W-SCU41 C200HW-COM02 C200HW-COM05 C200HW-COM06 CQM1-CIF01 CQM1-CIF02 CQM1-SCB41 CPM1-CIF01 CPM2C-CN111 CPM2C-CIF01-V1 CP1W-CIF01

Precautions

Precautions on system

- When connecting a GOT to the OMRON programmable controller, set a terminating resistor for the programmable controller.
  The GOT has a built-in terminating resistor.
- Small-sized programmable controller that cannot be connected
  CQM1-CPU11 does not have the RS-232C interface and cannot connect to a GOT.
- Connecting to C200HE
  Connect a GOT to the C200HE via a rack type host link unit or a communication board.
- For C200HE-CPU11, a communication board cannot be installed.
  Use a host link unit.

Precautions on setup

- Polar difference between GOT and OMRON product
  For signal names, poles A and B are reversed between a GOT and an OMRON product.

Related Manuals

• For details of system configuration and connection cable • For precautions and restrictions • For outlined procedure and checking for OMRON programmable controller connection	Chapter 11 in GOT1000 Series Connection Manual (SH-080532ENG)
• For controllers that can be monitored by GOT and accessible range	Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)
• For connection method with Handy GOT	Chapter 11 in Handy GOT User's Manual (JY997D20101)
• For connection method with GT SoftGOT1000	Chapter 2 in GT SoftGOT1000 Version2 Operating Manual (SH-080602ENG)
• For controllers that can be monitored by GT SoftGOT1000 and accessible range	Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)

* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

4.3.3 KEYENCE programmable controller

For details of the system configuration, refer to "Connection type" in section 4.3.1.

Connectable GOT

Connectable models

Series	Computer link connection		Direct CPU connection	
	RS-422/485	RS-232	RS-422/485	RS-232
KV-700 KV-1000	○	○	×	○
KV-3000	○	○	×	○
KV-5000	○	○	×	×

The GOT model to be used differs depending on the connection type.

Series		Connection type	GOT model to be used
GT11		RS-232 or RS-422 connections	GT115□-Q□BD
		Bus connection	GT115□-Q□BDQ, GT115□-Q□BDA
	Handy GOT	RS-232 or RS-422 connections	GT115□HS-Q□BD
GT10	GT105□	RS-232 or RS-422 connections	GT105□-Q□BD
	GT1030 GT1020	RS-232 connection	GT1030-LBD2/GT1030-LBDW2, GT1020-LBD2/GT1020-LBDW2
		RS-422 connection	GT1030-LBD/GT1030-LBDW, GT1020-LBD/GT1020-LBDW, GT1020-LBL/GT1020-LBLW (For GT1020-LBL/GT1020-LBLW, MELSEC-FXCPU connection is available only.)

Available unit for computer link connection

Unit	RS-422	RS-232
Multi-communication unit	KV-L20R KV-L20 KV-L20V	KV-L20R KV-L20 KV-L20V

Precautions

Precautions on system

- When connecting a GOT to the KEYENCE programmable controller, set terminating resistors for the programmable controller and a GOT.

Related Manuals

- For details of system configuration and connection cable
- For precautions and restrictions
- For outlined procedure and checking for KEYENCE programmable controller connection

→ Chapter 12 in GOT1000 Series Connection Manual (SH-080532ENG)

- For controllers that can be monitored by GOT and accessible range

→ Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)

- For connection method with Handy GOT

→ Chapter 12 in Handy GOT User's Manual (JY997D20101)

* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

4.3.4 KOYO EI programmable controller

For details of the system configuration, refer to "Connection type" in section 4.3.1.

Connectable GOT

Connectable models

Series	Model	Computer link connection		Direct CPU connection	
		RS-422	RS-232	RS-422	RS-232
KOSTAC SU series	SU-5E	○	○	○	○
	SU-6B	○	○	○	○
	SU-5M	○	○	○	○
	SU-6M	○	○	○	○
PZ series	PZ3	×	×	○	○
DirectLOGIC 205 series	D2-240	○	○	×	○
	D2-250-1	○	○	○	○
	D2-260	○	○	○	○
DirectLOGIC 05 series	D0-05AA	○	○	×	○
	D0-05AD	○	○	×	○
	D0-05AR	○	○	×	○
	D0-05DA	○	○	×	○
	D0-05DD	○	○	×	○
	D0-05DD-D	○	○	×	○
	D0-05DR	○	○	×	○
	D0-05DR-D	○	○	×	○
DirectLOGIC 06 series	D0-06DD1	○	○	○	○
	D0-06DD2	○	○	○	○
	D0-06DR	○	○	○	○
	D0-06DA	○	○	○	○
	D0-06AR	○	○	○	○
	D0-06AA	○	○	○	○
	D0-06DD1-D	○	○	○	○
	D0-06DD2-D	○	○	○	○
	D0-06DR-D	○	○	○	○

The GOT model to be used differs depending on the connection type.

Series		Connection type	GOT model to be used
GT11		RS-232 or RS-422 connections	GT115□-Q□BD
		Bus connection	GT115□-Q□BDQ, GT115□-Q□BDA
	Handy GOT	RS-232 or RS-422 connections	GT115□HS-Q□BD

Available unit for computer link connection

Unit	RS-422	RS-232
Data Communications module	U-01DM	U-01DM
	D2-DCM	D2-DCM
	D0-DCM	D0-DCM

Precautions

Precautions on system

- When connecting a GOT to the KOYO EI programmable controller, set a terminating resistor for the programmable controller.
  The GOT has a built-in terminating resistor.
- Clock setting of GOT
  The GOT clock function is available only for the PLC with a calendar function.
  Note:Although the "time adjusting" and "time broadcast" functions can be selected on the GOT, the "time broadcast" function is not available.
  Do not select the "time broadcast" function. If both of the functions are selected, not only the "time broadcast" function but also the "time adjusting" function will be disabled.

Related Manuals

• For details of system configuration and connection cable • For precautions and restrictions • For outlined procedure and checking for KOYO EI programmable controller connection	Chapter 12 in GOT1000 Series Connection Manual (SH-080532ENG)
• For controllers that can be monitored by GOT and accessible range	Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)
• For connection method with Handy GOT	Chapter 12 in Handy GOT User's Manual (JY997D20101)

* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

4.3.5 SHARP programmable controller

For details of the system configuration, refer to "Connection type" in section 4.3.1.

Connectable GOT

GT16 GT15 GT11

Connectable models

Series	Computer link connection		Direct CPU connection	
	RS-422	RS-232	RS-422	RS-232
JW-21CU JW-31CUH JW-50CUH	○	×	×	×
JW-22CU JW-32CUH JW-33CUH JW-70CUH JW-100CUH JW-100CU	○	×	○*1	
Z-512J	×	×	○*1	

*1 Either RS-422 or RS-232 interface can be selected.

The GOT model to be used differs depending on the connection type.

Series		Connection type	GOT model to be used
GT11		RS-232 or RS-422 connections	GT115□-Q□BD
		Bus connection	GT115□-Q□BDQ, GT115□-Q□BDA
	Handy GOT	RS-232 or RS-422 connections	GT115□HS-Q□BD

Available unit for computer link connection

Unit	RS-422	RS-232
Link unit	JW-21CM JW-10CM ZW-10CM	-

Precautions

Precautions on system

- For connecting to a GOT, use a link unit applicable to the JW-31CUH, JW-32CUH, and JW-33CUH.
- When connecting a GOT to the SHARP programmable controller, set a terminating resistor for the programmable controller.
  The GOT has a built-in terminating resistor.

Related Manuals

- For details of system configuration and connection cable
- For precautions and restrictions
- For outlined procedure and checking for SHARP programmable controller connection

→ Chapter 14 in GOT1000 Series Connection Manual (SH-080532ENG)

- For controllers that can be monitored by GOT and accessible range

→ Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)

- For connection method with Handy GOT

→ Chapter 14 in Handy GOT User's Manual (JY997D20101)

* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

4.3.6 JTEKT programmable controller

For details of the system configuration, refer to "Connection type" in section 4.3.1.

Connectable GOT

Connectable models

Series	Model		Computer link connection		Direct CPU connection	
			RS-422	RS-232	RS-422	RS-232
TOYOPUC series	PC3JG	TIC-6088	○	○*1	×	○*1
		TIC-6125				
	PC3J	TIC-5339	○	○*1	○	○*1
		TIC-5783				
	PC2J	THC-5070	○	○*1	×	○*1
		THC-5169				
		THC-5173				
		THC-2764				×
		THC-2994				
		THC-5053				

*1 The RS-232/RS-422 converter (TXU-2051) is required.

The GOT model to be used differs depending on the connection type.

Series		Connection type	GOT model to be used
GT11		RS-232 or RS-422 connections	GT115□-Q□BD
		Bus connection	GT115□-Q□BDQ, GT115□-Q□BDA
	Handy GOT	RS-232 or RS-422 connections	GT115□HS-Q□BD

Available unit for computer link connection

Unit	RS-422	RS-232
Link unit	THU-2755 THU-2927 THU-5139	-

Precautions

Precautions on system

- When the programmable controller is a terminating station, do not connect a terminating resistor.
  Set the GOT terminating resistor setting to off.
- System configuration
  Communication may not be correctly executed in a system that has the programmable controllers applicable to the PC3J extended function and those inapplicable to the function.
  The system must have programmable controllers applicable to the PC3J extended function only or those inapplicable to the function only.
- Clock setting of GOT
  The GOT clock setting is enabled only for the programmable controller corresponding to the station No. set for the host address.

Other precautions

- Setting station No. of programmable controller
  Make sure that the programmable controller corresponding to the station No. set for the host address exists in the system configuration.
- System alarm
  The system alarm can be displayed only for the programmable controller set as the host address.
  When connecting a GOT to the programmable controller compatible with the PC3J extended function, only the system alarm of the program No.1 can be displayed.
- Version of PC3J
  For PC3J, use the version 2.1 or later.

Related Manuals

• For details of system configuration and connection cable • For precautions and restrictions • For outlined procedure and checking for JTEKT programmable controller connection	Chapter 15 in GOT1000 Series Connection Manual (SH-080532ENG)
• For controllers that can be monitored by GOT and accessible range	Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)
• For connection method with Handy GOT	Chapter 17 in Handy GOT User's Manual (JY997D20101)

* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

4.3.7 TOSHIBA programmable controller

For details of the system configuration, refer to "Connection type" in section 4.3.1.

Connectable GOT

Connectable models

Series	Model	Computer link connection		Direct CPU connection	
		RS-422	RS-232	RS-422	RS-232
PROSEC T series	T2(PU224)	×	×	○	×
	T2E			○*1	
	T2N			○*1	
	T3			○	×
	T3H			○	×
V series	model 3000(S3)	×	×	○	×
	model 2000(S2)				
	model 2000(S2T)				

*1 Either RS-422 or RS-232 interface can be selected.

The GOT model to be used differs depending on the connection type.

Series		Connection type	GOT model to be used
GT11		RS-232 or RS-422 connections	GT115□-Q□BD
		Bus connection	GT115□-Q□BDQ, GT115□-Q□BDA
	Handy GOT	RS-232 or RS-422 connections	GT115□HS-Q□BD

Precautions

Precautions on system

- When connecting a GOT to the TOSHIBA programmable controller, set a terminating resistor for the programmable controller.
  The GOT has a built-in terminating resistor.

Related Manuals

- For details of system configuration and connection cable
- For precautions and restrictions
- For outlined procedure and checking of TOSHIBA programmable controller connection

→ Chapter 16 in GOT1000 Series Connection Manual (SH-080532ENG)

- For controllers that can be monitored by GOT and accessible range

→ Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)

- For connection method with Handy GOT

→ Chapter 15 in Handy GOT User's Manual (JY997D20101)

* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

4.3.8 TOSHIBA MACHINE programmable controller

For details of the system configuration, refer to "Connection type" in section 4.3.1.

Connectable GOT

Connectable models

Series	Model	Computer link connection		Direct CPU connection	
		RS-422	RS-232	RS-422	RS-232
TCmini series	TC3-01	×	×	×	○
	TC3-02	×	×	×	○
	TC5-20	×	×	×	○
	TC6-00	×	×	×	○
	TC8-00	×	×	×	○

The GOT model to be used differs depending on the connection type.

Series		Connection type	GOT model to be used
GT11		RS-232 or RS-422 connections	GT115□-Q□BD
		Bus connection	GT115□-Q□BDQ, GT115□-Q□BDA
	Handy GOT	RS-232 or RS-422 connections	GT115□HS-Q□BD
GT10	GT105□	RS-232 or RS-422 connections	GT105□-Q□BD
	GT1030 GT1020	RS-232 connection	GT1030-LBD2/GT1030-LBDW2, GT1020-LBD2/GT1020-LBDW2
		RS-422 connection	GT1030-LBD/GT1030-LBDW, GT1020-LBD/GT1020-LBDW, GT1020-LBL/GT1020-LBLW (For GT1020-LBL/GT1020-LBLW, MELSEC-FXCPU connection is available only.)

Related Manuals

- For details of system configuration and connection cable
- For precautions and restrictions
- For outlined procedure and checking of TOSHIBA MACHINE programmable controller connection

➤ Chapter 17 in GOT1000 Series Connection Manual (SH-080532ENG)

- For controllers that can be monitored by GOT and accessible range

➤ Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)

- For connection method with Handy GOT

➤ Chapter 16 in Handy GOT User's Manual (JY997D20101)

* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

4.3.9 HITACHI IES programmable controller

For details of the system configuration, refer to "Connection type" in section 4.3.1.

Connectable GOT

Connectable models

Series	Model	Computer link connection		Direct CPU connection	
		RS-422	RS-232	RS-422	RS-232
Large-sized H series	H-302(CPU2-03H)	○*1	○*1	×	○
	H-702(CPU2-07H)				
	H-1002(CPU2-10H)				
	H-2002(CPU-20H)				
	H-4010(CPU3-40H)				
	H-300(CPU-03Ha)				
	H-700(CPU-07Ha)				
	H-2000(CPU-20Ha)				
H-200 to 252 series	H-200(CPU-02H, CPE-02H)	×	×	×	○
	H-250(CPU21-02H)				
	H-252(CPU22-02H)				
	H-252B(CPU22-02HB)				
	H-252C(CPU22-02HC)				
	H-252C(CPE22-02HC)				
H series board type	H-20DR	×	×	×	○
	H-28DR				
	H-40DR				
	H-64DR				
	H-20DT				
	H-28DT				
	H-40DT				
	H-64DT				
	HL-40DR				
	HL-64DR				
EH-150 series	EH-CPU104	×	×	×	○
	EH-CPU208				
	EH-CPU308				
	EH-CPU316				

*1 Either RS-422 or RS-232 interface can be selected.

The GOT model to be used differs depending on the connection type.

Series		Connection type	GOT model to be used
GT11		RS-232 or RS-422 connections	GT115□-Q□BD
		Bus connection	GT115□-Q□BDQ, GT115□-Q□BDA
	Handy GOT	RS-232 or RS-422 connections	GT115□HS-Q□BD

Available unit for computer link connection

Unit	RS-422	RS-232
Intelligent serial port module	COMM-H COMM-2H	COMM-H COMM-2H

Precautions

Precautions on system

- When connecting a GOT to the intelligent serial port module, connect a terminating resistor to the intelligent serial port module.
  The GOT has a built-in terminating resistor.

Related Manuals

• For details of system configuration and connection cable • For precautions and restrictions • For outlined procedure and checking for HITACHI IES programmable controller connection	Chapter 18 in GOT1000 Series Connection Manual (SH-080532ENG)
• For controllers that can be monitored by GOT and accessible range	Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)
• For connection method with Handy GOT	Chapter 18 in Handy GOT User's Manual (JY997D20101)

* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

4.3.10 HITACHI programmable controller

For details of the system configuration, refer to "Connection type" in section 4.3.1.

Connectable GOT

Connectable models

Series	Model	Computer link connection		Direct CPU connection	
		RS-422	RS-232	RS-422	RS-232
S10V	LQP510	○	○	○	×
	LQP520			×	
S10mini	LQP800				
	LQP000				
	LQP010				
	LQP011				
	LQP120				

The GOT model to be used differs depending on the connection type.

Series		Connection type	GOT model to be used
GT11		RS-232 or RS-422 connections	GT115□-Q□BD
		Bus connection	GT115□-Q□BDQ, GT115□-Q□BDA
	Handy GOT	RS-232 or RS-422 connections	GT115□HS-Q□BD

Available unit for computer link connection

Unit	RS-422	RS-232
Communication module	LQE565 LQE165	LQE560 LQE060 LQE160

Related Manuals

- For details of system configuration and connection cable
- For precautions and restrictions
- For outlined procedure and checking of HITACHI programmable controller connection

➤ Chapter 19 in GOT1000 Series Connection Manual (SH-080532ENG)

- For controllers that can be monitored by GOT and accessible range

➤ Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)

- For connection method with Handy GOT

➤ Chapter 19 in Handy GOT User's Manual (JY997D20101)

* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

4.3.11 FUJI FA programmable controller

For details of the system configuration, refer to "Connection type" in section 4.3.1.

Connectable GOT

Connectable models

Series	Model	Computer link connection		Direct CPU connection	
		RS-422	RS-232	RS-422	RS-232
MICREX-F	F55 F70 F120S F140S F15□S	○	○	×	×

The GOT model to be used differs depending on the connection type.

Series		Connection type	GOT model to be used
GT11		RS-232 or RS-422 connections	GT115□-Q□BD
		Bus connection	GT115□-Q□BDQ, GT115□-Q□BDA
	Handy GOT	RS-232 or RS-422 connections	GT115□HS-Q□BD

Available unit for computer link connection

Unit	RS-422	RS-232
RS-232C interface card	-	NV1L-RS2
RS-232C/485 interface capsule	FFK120A-C10	FFK120A-C10
General-purpose interface module	NC1L-RS4 FFU120B	NC1L-RS2 FFU120B

Related Manuals

- For details of system configuration and connection cable
- For precautions and restrictions
- For outlined procedure and checking of FUJI FA programmable controller connection

→ Chapter 20 in GOT1000 Series Connection Manual (SH-080532ENG)

- For controllers that can be monitored by GOT and accessible range

→ Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)

- For connection method with Handy GOT

→ Chapter 20 in Handy GOT User's Manual (JY997D20101)

* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

4.3.12 MATSUSHITA programmable controller

For details of the system configuration, refer to "Connection type" in section 4.3.1.

Connectable GOT

Connectable models

Series	Computer link connection		Direct CPU connection	
	RS-422	RS-232	RS-422	RS-232
FP0-C16CT	×	×	×	○
FP0-C32CT				
FP1-C24C				
FP1-C40C				
FP2	×	○	×	○
FP2SH				
FP3				
FP5				
FP10(S)				
FP10SH				
FP-M(C20TC)	×	×	×	○
FP-M(C32TC)				
FP-∑				
FP-X	○	○		

The GOT model to be used differs depending on the connection type.

Series		Connection type	GOT model to be used
GT11		RS-232 or RS-422 connections	GT115□-Q□BD
		Bus connection	GT115□-Q□BDQ, GT115□-Q□BDA
	Handy GOT	RS-232 or RS-422 connections	GT115□HS-Q□BD
GT10	GT105□	RS-232 or RS-422 connections	GT105□-Q□BD
	GT1030 GT1020	RS-232 connection	GT1030-LBD2/GT1030-LBDW2, GT1020-LBD2/GT1020-LBDW2
		RS-422 connection	GT1030-LBD/GT1030-LBDW, GT1020-LBD/GT1020-LBDW, GT1020-LBL/GT1020-LBLW (For GT1020-LBL/GT1020-LBLW, MELSEC-FXCPU connection is available only.)

Available unit for computer link connection

Unit	RS-422	RS-232
Computer communication unit	AFPX-COM3	AFP2462 AFP3462 AFP5462 AFPX-COM1 AFPX-COM2 AFPX-COM4

Related Manuals

- For details of system configuration and connection cable
- For precautions and restrictions
- For outlined procedure and checking of MATSUSHITA programmable controller connection

➤ Chapter 21 in GOT1000 Series Connection Manual (SH-080532ENG)

- For controllers that can be monitored by GOT and accessible range

➤ Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)

- For connection method with Handy GOT

➤ Chapter 21 in Handy GOT User's Manual (JY997D20101)

* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

4.3.13 YASKAWA programmable controller

For details of the system configuration, refer to "Connection type" in section 4.3.1.

Connectable GOT

Connectable models

Series	GT16/GT15/GT11/GT10*1					GT SoftGOT1000				
	Computer link connection		Direct CPU connection		Ethernet *2	Computer link connection		Direct CPU connection		Ethernet
	RS-422	RS-232	RS-422	RS-232		RS-422	RS-232	RS-422	RS-232	
GL120	○	×	×	○	×	×	×	×	○	×
GL130										
GL60S		○		×			○		×	
GL60H										
GL70H										
CP-9200SH	×	○	×	×	○	○	○	×	×	
CP-9300MS		×		○	×		×		○	
MP920	○	○			○		○			○
MP930	×	×	○	○	×	×	×	○	○	×
MP940										
PROGIC-8										
CP-9200(H)			×							
CP-312				×	○				×	○
MP2200	○	○				○				
MP2300										

*1 GT10 is compatible with the followings.
CP-9200SH, MP920, MP930, MP940, MP2200, and MP2300

*2 Available only for GT16 and GT15.

The GOT model to be used differs depending on the connection type.

Series		Connection type	GOT model to be used
GT11		RS-232 or RS-422 connections	GT115□-Q□BD
		Bus connection	GT115□-Q□BDQ, GT115□-Q□BDA
	Handy GOT	RS-232 or RS-422 connections	GT115□HS-Q□BD
GT10	GT105□	RS-232 or RS-422 connections	GT105□-Q□BD
	GT1030 GT1020	RS-232 connection	GT1030-LBD2/GT1030-LBDW2, GT1020-LBD2/GT1020-LBDW2
		RS-422 connection	GT1030-LBD/GT1030-LBDW, GT1020-LBD/GT1020-LBDW, GT1020-LBL/GT1020-LBLW (For GT1020-LBL/GT1020-LBLW, MELSEC-FXCPU connection is available only.)

Available unit for computer link connection

Unit	GT15/GT11/GT10		GT SoftGOT1000	
	RS-422	RS-232	RS-422	RS-232
MEMOBUS Module/ Communications Module	JAMSC-120NOM27100 JAMSC-IF612 217IF 217IF-01	JAMSC-IF60 JAMSC-IF61 CP-217IF 217IF 217IF-01 218IF-01	-	JAMSC-IF60 JAMSC-IF61 CP-217IF 217IF 217IF-01 218IF-01

Available unit for Ethernet connection

Unit	Model
Communications Module	218IF, 218IF-01

Precautions

Precautions on system

- When connecting a GOT to the YASKAWA programmable controller, connect a terminating resistor to the programmable controller as necessary.
  The GOT has a built-in terminating resistor.
- The target device of an Ethernet cable differs depending on the Ethernet network system configuration to be used.
  Connect the cable to the system devices, including Ethernet modules, hubs, and transceivers, according to the Ethernet network system to be used.
- When connecting GT16 to an equipment that meets the 10BASE (-T/2/5) standard, use the switching hub and operate in an environment where 10Mbps and 100Mbps can be mixed.
- Communication via network system
  A GOT cannot access a programmable controller on the other networks via a programmable controller (the network module, Ethernet module, and others) on the network where the GOT is connected.
- When connecting multiple network devices (including a GOT) to the same segment
  When multiple network devices (including a GOT) are connected to the same segment, the network load may increase, and the communication speed may slow down between the GOT and a programmable controller. The following actions can improve the communication performance.
  - Use a switching hub.
  - Use the high-speed 100BASE-TX (100Mbps).
  - Reduce the GOT monitoring points.

Related Manuals

• For details of system configuration and connection cable • For precautions and restrictions • For outlined procedure and checking of YASKAWA programmable controller connection	Chapter 22 in GOT1000 Series Connection Manual (SH-080532ENG)
• For controllers that can be monitored by GOT and accessible range	Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)
• For connection method with Handy GOT	Chapter 22 in Handy GOT User's Manual (JY997D20101)

* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

4.3.14 YOKOGAWA programmable controller

For details of the system configuration, refer to "Connection type" in section 4.3.1.

Connectable GOT

Connectable models

Series	Model	GT16/GT15/GT11					GT SoftGOT1000				
		Computer link connection		Direct CPU connection		Ethernet *2	Computer link connection		Direct CPU connection		Ethernet
		RS-422	RS-232	RS-422	RS-232		RS-422	RS-232	RS-422	RS-232	
FA500	FA500	○ *1		×	×	×					×
FA-M3	F3SP05	○			○	○					○
	F3SP08										
	F3SP10	×									
	F3SP20				×	×					×
	F3SP30										
	F3FP36										
	F3SP21										
	F3SP25										
	F3SP35	○	○	×	○	○	×	×	×	×	○
	F3SP28										
	F3SP38										
	F3SP53										
	F3SP58										
	F3SP59										
	F3SP66	×	×								
	F3SP67										
STARDOM	NFCP100	×	×	×	○	×					×
	NFJT100										

*1 Either RS-422 or RS-232 interface can be selected.

*2 Available only for GT16 and GT15.

The GOT model to be used differs depending on the connection type.

Series		Connection type	GOT model to be used
GT11		RS-232 or RS-422 connections	GT115□-Q□BD
		Bus connection	GT115□-Q□BDQ, GT115□-Q□BDA
	Handy GOT	RS-232 or RS-422 connections	GT115□HS-Q□BD

Available unit for computer link connection

Unit	RS-422	RS-232
PC link module	LC02-0N F3LC11-2N	LC01-0N LC02-0N F3LC01-1N F3LC11-1N F3LC11-1F F3LC12-1F

Available unit for Ethernet connection

Unit	Model
Ethernet Interface Module	F3LE01-5T, F3LE11-0T, F3LE12-0T

Precautions

Precautions on system

- Precautions for connecting to FA-M3
  - For connecting the GOT to the programming tool interface connector with the CPU port/D-sub 9-pin conversion cable, the GOT cannot connect to the F3SP10, F3SP20, F3SP30, and F3SP36.
  - The F3SP10 is not applicable to the PC link module (F3LC11-2N). A GOT cannot connect to the F3P10 via the RS-422 interface.
- Precautions for connecting to STARDOM
  - Dual-redundant configuration
    When the dual-redundant configuration is used with STARDOM, the GOT cannot connect to STARDOM.
  - System alarm
    Programmable controller errors in the system alarm are not displayed.
  - Clock setting of GOT
    STARDOM does not have the clock data write/read function. Even though [Adjust] or [Broadcast] is set for the clock setting, the setting is invalid (not processed).
- When connecting a GOT to the PC link module, connect a terminating resistor for the PC link module. The GOT has a built-in terminating resistor.
- The target device of an Ethernet cable differs depending on the Ethernet network system configuration to be used.
  Connect the cable to the system devices, including Ethernet modules, hubs, and transceivers, according to the Ethernet network system to be used.
- When connecting GT16 to an equipment that meets the 10BASE (-T/2/5) standard, use the switching hub and operate in an environment where 10Mbps and 100Mbps can be mixed.
- Communication via network system
  A GOT cannot access a programmable controller on the other networks via a programmable controller (the network module, Ethernet module, and others) on the network where the GOT is connected.
- When connecting multiple network devices (including a GOT) to the same segment
  When multiple network devices (including a GOT) are connected to the same segment, the network load may increase, and the communication speed may slow down between the GOT and a programmable controller. The following actions can improve the communication performance.
  - Use a switching hub.
  - Use the high-speed 100BASE-TX (100Mbps).
  - Reduce the GOT monitoring points.

Precautions on setup

- Set the switch of the PC link module before installing the PC link module on a base unit.
- Polar difference between GOT and YOKOGAWA product
  For signal names, poles A and B are reversed between a GOT and a YOKOGAWA product.
- When connecting a GOT to YOKOGAWA programmable controller, devices to be set for objects must be in the device range of YOKOGAWA programmable controller.
  When a device outside the device range is set for an object, an invalid value is displayed for the object. (The system alarm is not displayed).

Related Manuals

• For details of system configuration and connection cable • For precautions and restrictions • For outlined procedure and checking of YOKOGAWA programmable controller connection	➤	Chapter 23 in GOT1000 Series Connection Manual (SH-080532ENG)
• For controllers that can be monitored by GOT and accessible range	➤	Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)
• For connection method with Handy GOT	➤	Chapter 23 in Handy GOT User's Manual (JY997D20101)

* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

4.3.15 ALLEN-BRADLEY programmable controller

For details of the system configuration, refer to "Connection type" in section 4.3.1.

Connectable GOT

Connectable models

Series	Model	GT16/GT15/GT11					GT10				
		Computer link connection		Direct CPU connection		Ether-net*4	Computer link connection		Direct CPU connection		Ether-net*4
		RS-422	RS-232	RS-422	RS-232		RS-422	RS-232	RS-422	RS-232	
SLC500 series*1	SLC500-20	×	×	×	○	×	×	×	×	×	×
	SLC500-30										
	SLC500-40										
	SLC5/01										
	SLC5/02									○	
	SLC5/03										
	SLC5/04										
	SLC5/05										
MicroLogix1000 series (digital CPU)*1	1761-L10BWA	×	×	×	○	×	×	×	×	○	×
	1761-L10BWB										
	1761-L16AWA										
	1761-L16BWA										
	1761-L16BWB										
	1761-L16BBB										
	1761-L32AWA										
	1761-L32BWA										
	1761-L32BWB										
	1761-L32BBB										
	1761-L32AAA										
MicroLogix1000 series (analog CPU)*1*2*3	1761-L20AWA-5A										
	1761-L20BWA-5A										
	1761-L20BWB-5A										
MicroLogix1200 series*1	1762-L24BWA										
MicroLogix1500 series*1	1764-LSP										
ControlLogix series	1756-L	×	×	×	○	○	×	×	×	×	×
	1756-L1M1										
	1756-L1M2										
	1756-L1M3										
	1756-L61										
	1756-L62										
	1756-L63										
	1756-L55M12										
	1756-L55M13										
	1756-L55M14										
	1756-L55M16										
	1756-L55M22										
	1756-L55M23										
	1756-L55M24										

Series	Model	GT15/GT11					GT10				
		Computer link connection		Direct CPU connection		Ether-net (Soon to be suppor-ted)*4	Computer link connection		Direct CPU connection		Ether-net (Soon to be suppor-ted)*4
		RS-422	RS-232	RS-422	RS-232		RS-422	RS-232	RS-422	RS-232	
CompactLogix series	1769-L31	×	×	×	○	×	×	×	×	×	×
	1769-L32E					○					
	1769-L32C					×					
	1769-L35E					○					
	1769-L35CR					×					
FlexLogix series	1794-L33	×	×	×	○	×	×	×	×	×	×
	1794-L34										

*1 Connectable to the DH485 network via Adapter (1770-KF3).

*2 The CPU of series C or later is applicable for connecting to the DH485 network. (The DH485 protocol is not supported for series B or earlier.)

*3 The CPU of series D or later is applicable to the one-on-one connection. (The DF1 half duplex is not supported for series C or earlier.)

*4 Available only for GT16 and GT15. EtherNet/IP (PCCC protocol) is supported.

The GOT model to be used differs depending on the connection type.

Series		Connection type	GOT model to be used
GT11		RS-232 or RS-422 connections	GT115□-Q□BD
		Bus connection	GT115□-Q□BDQ, GT115□-Q□BDA
	Handy GOT	RS-232 or RS-422 connections	GT115□HS-Q□BD
GT10	GT105□	RS-232 or RS-422 connections	GT105□-Q□BD
	GT1030 GT1020	RS-232 connection	GT1030-LBD2/GT1030-LBDW2, GT1020-LBD2/GT1020-LBDW2
		RS-422 connection	GT1030-LBD/GT1030-LBDW, GT1020-LBD/GT1020-LBDW, GT1020-LBL/GT1020-LBLW (For GT1020-LBL/GT1020-LBLW, MELSEC-FXCPU connection is available only.)

Available unit for Ethernet connection

Unit	Model
EtherNet/IP communication module	1756-ENBT, 1788-ENBT

Precautions

Precautions on system

- The target device of an Ethernet cable differs depending on the Ethernet network system configuration to be used.
- Connect the cable to the system devices, including Ethernet modules, hubs, and transceivers, according to the Ethernet network system to be used.
- When connecting GT16 to an equipment that meets the 10BASE (-T/2/5) standard, use the switching and operate in an environment where 10Mbps and 100Mbps can be mixed.
- Communication via network system
  A GOT cannot access a programmable controller on the other networks via a programmable controller (the network module, Ethernet module, and others) on the network where the GOT is connected.
- When connecting multiple network devices (including a GOT) to the same segment
  When multiple network devices (including a GOT) are connected to the same segment, the network load may increase, and the communication speed may slow down between the GOT and a programmable controller. The following actions can improve the communication performance.
  - Use a switching hub.
  - Use the high-speed 100BASE-TX (100Mbps).
  - Reduce the GOT monitoring points.

Related Manuals

• For details of system configuration and connection cable • For precautions and restrictions • For outlined procedure and checking for ALLEN-BRADLEY programmable controller connection	Chapter 24 in GOT1000 Series Connection Manual (SH-080532ENG)
• For controllers that can be monitored by GOT and accessible range	Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)
• For connection method with Handy GOT	Chapter 24 in Handy GOT User's Manual (JY997D20101)

* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

4.3.16 GE FANUC programmable controller

For details of the system configuration, refer to "Connection type" in section 4.3.1.

Connectable GOT

Connectable models

Series	Model	Computer link connection		Direct CPU connection	
		RS-422	RS-232	RS-422	RS-232
Series 90 - 30	IC693CPU311	○	○	×	×
	IC693CPU313	○	○	×	×
	IC693CPU323	○	○	×	×
	IC693CPU350	○	○	○	○
	IC693CPU360	○	○	○	○
	IC693CPU363	○	○	○	○
	IC693CPU366	○	○	○	○
	IC693CPU367	○	○	○	○
	IC693CPU374	○	○	○	○
Series 90 - 70	IC697CPU731	○	○	×	×
	IC697CPX772	○	○	×	×
	IC697CPX782	○	○	×	×
	IC697CPX928	○	○	×	×
	IC697CPX935	○	○	×	×
	IC697CPU780	○	○	×	×
	IC697CGR772	○	○	×	×
	IC697CGR935	○	○	×	×
	IC697CPU788	○	○	×	×
	IC697CPU789	○	○	×	×
	IC697CPM790	○	○	×	×
VersaMax Micro	IC200UAA003	○	○	○	○
	IC200UAR014	×	×	×	○
	IC200UDD104	×	×	×	○
	IC200UDD112	×	×	×	○
	IC200UDR001	×	×	×	○
	IC200UDR002	×	×	×	○
	IC200UDR003	×	×	×	○
	IC200UAL004	×	×	○	○
	IC200UAL005	×	×	○	○
	IC200UAL006	×	×	○	○
	IC200UAA007	×	×	○	○
	IC200UAR028	×	×	○	○
	IC200UDD110	×	×	○	○
	IC200UDD120	×	×	○	○
	IC200UDD212	×	×	○	○
	IC200UDR005	×	×	○	○
	IC200UDR006	×	×	○	○
	IC200UDR010	×	×	○	○
	IC200UDD064	○	○	○	○
	IC200UDD164	○	○	○	○
	IC200UDR164	○	○	○	○
	IC200UDR064	○	○	○	○

The GOT model to be used differs depending on the connection type.

Series		Connection type	GOT model to be used
GT11		RS-232 or RS-422 connections	GT115□-Q□BD
		Bus connection	GT115□-Q□BDQ, GT115□-Q□BDA
	Handy GOT	RS-232 or RS-422 connections	GT115□HS-Q□BD

Available unit for computer link connection

Unit	RS-422	RS-232
Communication Modules	IC693CMM311 IC697CMM711	IC693CMM311 IC697CMM711

Precautions

Precautions on system

- When connecting a GOT to the GE FANUC programmable controller, set a terminating resistor for the programmable controller.
  The GOT has a built-in terminating resistor.
- Clock setting of GOT
  The PLC clock data cannot be written to or read from the GOT.
  The settings of "time adjusting" or "time broadcast" made on the GOT will be disabled on the PLC.

Related Manuals

- For details of system configuration and connection cable
- For precautions and restrictions
- For outlined procedure and checking for GE FANUC programmable controller connection

➤ Chapter 25 in GOT1000 Series Connection Manual (SH-080532ENG)

- For controllers that can be monitored by GOT and accessible range

➤ Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)

- For connection method with Handy GOT

➤ Chapter 25 in Handy GOT User's Manual (JY997D20101)

* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

4.3.17 SIEMENS programmable controller

For details of the system configuration, refer to "Connection type" in section 4.3.1.

Connectable GOT

Connectable models

Series	Computer link connection		Direct CPU connection	
	RS-422	RS-232	RS-422	RS-232
SIMATIC S7-200 series	×	×	×	○
SIMATIC S7-300 series				
SIMATIC S7-400 series				

The GOT model to be used differs depending on the connection type.

Series		Connection type	GOT model to be used
GT11		RS-232 or RS-422 connections	GT115□-Q□BD
		Bus connection	GT115□-Q□BDQ, GT115□-Q□BDA
	Handy GOT	RS-232 or RS-422 connections	GT115□HS-Q□BD
GT10	GT105□	RS-232 or RS-422 connections	GT105□-Q□BD
	GT1030 GT1020	RS-232 connection	GT1030-LBD2/GT1030-LBDW2, GT1020-LBD2/GT1020-LBDW2
		RS-422 connection	GT1030-LBD/GT1030-LBDW, GT1020-LBD/GT1020-LBDW, GT1020-LBL/GT1020-LBLW (For GT1020-LBL/GT1020-LBLW, MELSEC-FXCPU connection is available only.)

Precautions

Other precautions

- Alarm list display function (system alarm) for GOT
  When a GOT is connected to the SIEMENS programmable controller, programmable controller errors cannot be displayed with the alarm list display function (system alarm). (Check the errors with monitoring the SIEMENS programmable controller with the GOT.)
- At system start-up
  (1) At power-on
  Power on all the programmable controller CPU before powering on a GOT. When powering on the programmable controller CPU after powering on a GOT, reboot the GOT.
  (2) At power-off of other station programmable controller CPU
  When any of the other programmable controller CPUs (that are not connected to HMI Adapter) is powered off, a GOT stops monitoring.
  When rebooting the GOT, the GOT can start monitoring. (Even though the programmable controller is powered on again, the GOT does not restart monitoring.)

Related Manuals

- For details of system configuration and connection cable
- For precautions and restrictions
- For outlined procedure and checking for SIEMENS programmable controller connection

➤ Chapter 27 in GOT1000 Series Connection Manual (SH-080532ENG)

- For controllers that can be monitored by GOT and accessible range

➤ Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)

- For connection method with Handy GOT

➤ Chapter 26 in Handy GOT User's Manual (JY997D20101)

* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

4.3.18 LS INDUSTRIAL SYSTEMS programmable controller

For details of the system configuration, refer to "Connection type" in section 4.3.1.

Connectable GOT

Connectable models

Series	Model	Computer link connection		Direct CPU connection		Ethernet
		RS-422	RS-232	RS-422	RS-232	
K300S	K4P-15AS	○	○	×	×	×
K200S	K3P-07□S	○	○	×	×	×
K120S	K7M-D□□□U	○	○	×	○	×
K80S	K7M-D□□□S(/DC)	○	○	×	○	×

The GOT model to be used differs depending on the connection type.

Series		Connection type	GOT model to be used
GT11		RS-232 or RS-422 connections	GT115□-Q□BD
		Bus connection	GT115□-Q□BDQ, GT115□-Q□BDA
	Handy GOT	RS-232 or RS-422 connections	GT115□HS-Q□BD
GT10	GT105□	RS-232 or RS-422 connections	GT105□-Q□BD
	GT1030 GT1020	RS-232 connection	GT1030-LBD2/GT1030-LBDW2, GT1020-LBD2/GT1020-LBDW2
		RS-422 connection	GT1030-LBD/GT1030-LBDW, GT1020-LBD/GT1020-LBDW, GT1020-LBL/GT1020-LBLW (For GT1020-LBL/GT1020-LBLW, MELSEC-FXCPU connection is available only.)

Available unit for computer link connection

Unit	RS-422	RS-232
Cnet I/F modules	G7L-CUEC G6L-CUEC G4L-CUEA	G7L-CUEB G6L-CUEB G4L-CUEA

Related Manuals

- For details of system configuration and connection cable
- For precautions and restrictions
- For outlined procedure and checking for LS INDUSTRIAL SYSTEMS programmable controller programmable controller connection

➤ Chapter 26 in GOT1000 Series Connection Manual (SH-080532ENG)

- For controllers that can be monitored by GOT and accessible range

➤ Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)

- For connection method with Handy GOT

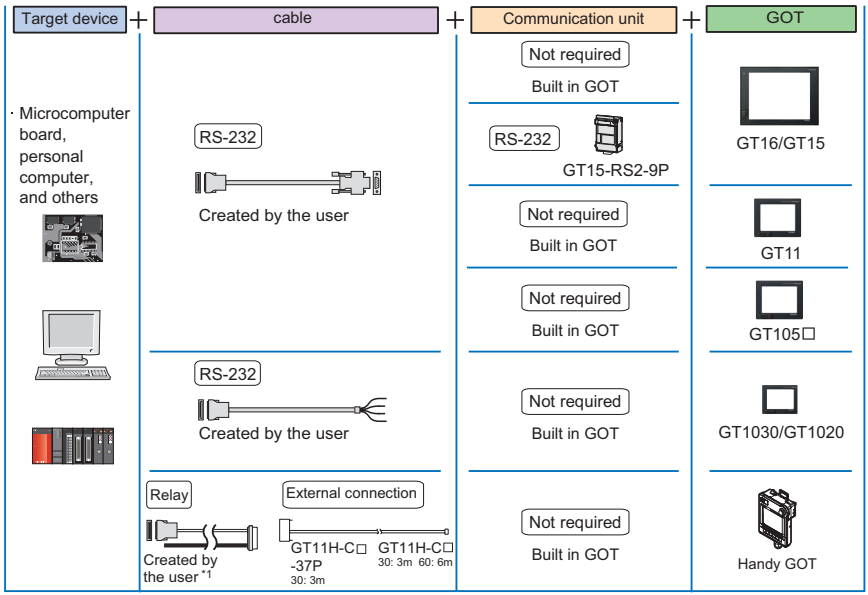
➤ Chapter 23 in Handy GOT User's Manual (JY997D20101)

* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

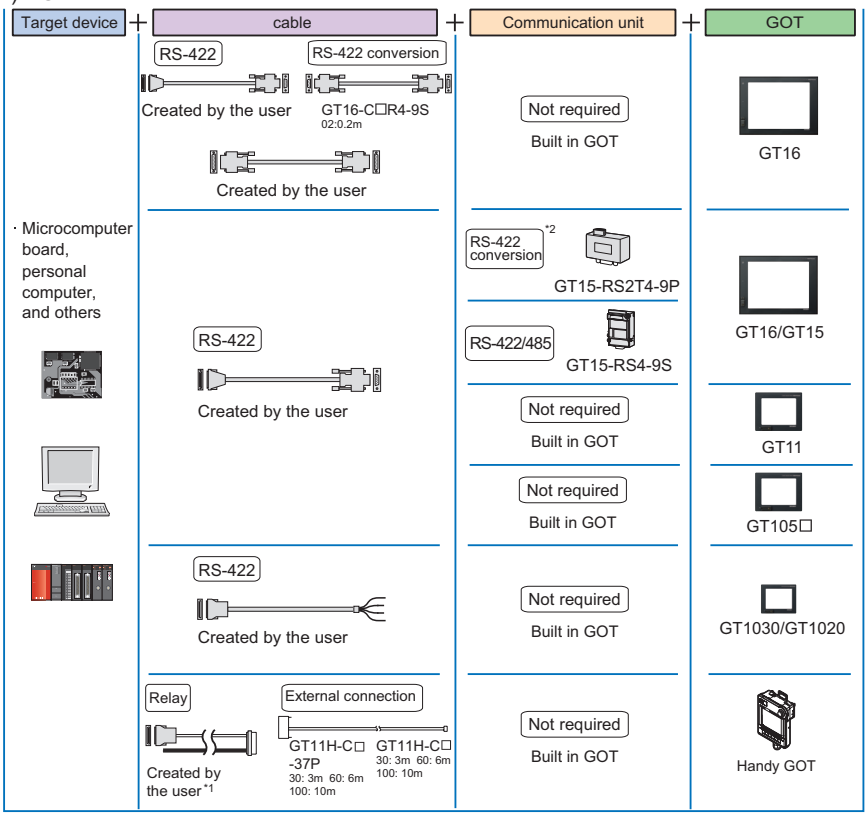
MEMO

System configuration

1) RS-232



2) RS-422



*1: Required for using GT11H-C□-37P.

*2: Use GT15-RS4-9S for using GT155□.

The GOT model to be used differs depending on the connection type.

Series		Connection type	GOT model to be used
GT11		RS-232 or RS-422 connections	GT115□-Q□BD
		Bus connection	GT115□-Q□BDQ, GT115□-Q□BDA
	Handy GOT	RS-232 or RS-422 connections	GT115□HS-Q□BD
GT10	GT105□	RS-232 or RS-422 connections	GT105□-Q□BD
	GT1030 GT1020	RS-232 connection	GT1030-LBD2/GT1030-LBDW2, GT1020-LBD2/GT1020-LBDW2
		RS-422 connection	GT1030-LBD/GT1030-LBDW, GT1020-LBD/GT1020-LBDW, GT1020-LBL/GT1020-LBLW (For GT1020-LBL/GT1020-LBLW, MELSEC-FXCPU connection is available only.)

Precautions

Other precautions

- Virtual device in GOT
  The virtual device in a GOT is used for the microcomputer connection. (Devices for a programmable controller are not used.)

Related Manuals

- For details of system configuration and connection cable
- For precautions and restrictions
- For outlined procedure and checking of microcomputer connection

Chapter 28 in GOT1000 Series Connection Manual (SH-080532ENG)

- For controllers that can be monitored by GOT and accessible range

Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)

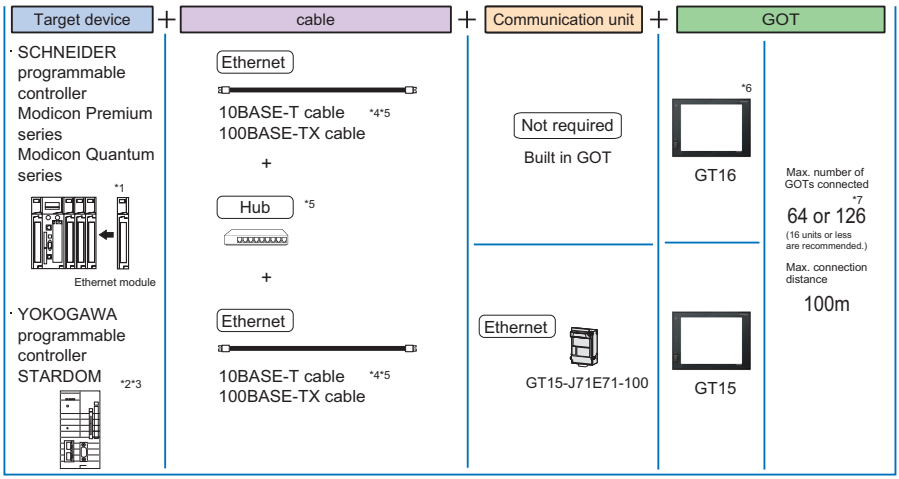
- For connection method with Handy GOT

Chapter 27 in Handy GOT User's Manual (JY997D20101)

* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

MEMO

System configuration



*1: Connect the GOT to the Ethernet module via a hub.
*2: When connecting a GOT to a programmable controller, connect to the programmable controller Ethernet port via a hub.
*3: When connecting STARDOM of the YOKOGAWA programmable controller via MODBUS®/TCP connection, Modbus Communication Portfolio License is required. For details, refer to the YOKOGAWA programmable controller manual.
*4: For the twisted pair cable, use the straight cable.
*5: Use cables, connectors, and hubs that are compliant with the IEEE802.3 10BASE-T/100BASE-TX standard.
*6: When connecting GT16 to an equipment that meets the 10BASE (-T/2/5) standard, use the switching hub and operate in an environment where 10Mbps and 100Mbps can be mixed.
*7: Up to 126 GOTs can be connected to STARDOM of the YOKOGAWA programmable controller.

Connectable models

Manufacturer	Series	Model	GT16/GT15 MODBUS® /TCP connection*8
Schneider Electric SA	Modicon Premium	TSX P57 203M	○
		TSX P57 253M	
		TSX P57 303M	
		TSX P57 353M	
		TSX P57 453M	
	Modicon Quantum	140 CPU 311 10	
		140 CPU 434 12U	
		140 CPU 534 14U	
		140 CPU 651 50	
		140 CPU 651 60	
		140 CPU 671 60	
		140 CPU 113 02	
		140 CPU 113 03	
		140 CPU 434 12A	
		140 CPU 534 14A	
Yokogawa Electric Corporation	STARDOM	NFCP100	○
		NFJT100	

*8 Supporting only MODBUS® /TCP connection. Ethernet connection is not available.

Available unit for MODBUS® /TCP connection

Unit	Model
SCHNEIDER Ethernet module	TSX ETY 4102 TSX ETY 5102 140 NOE 771 00 140 NOE 771 10 140 NWM 100 00

Precautions

Precautions on system

- Precautions for connecting to STARDOM
  - Dual-redundant configuration
    When the dual-redundant configuration is used with STARDOM, the GOT cannot connect to STARDOM.
  - System alarm
    Programmable controller errors in the system alarm are not displayed.
  - Clock setting of GOT
    STARDOM does not have the clock data write/read function. Even though [Adjust] or [Broadcast] is set for the clock setting, the setting is invalid (not processed).
- When connecting multiple network devices (including a GOT) to the same segment
  When multiple network devices (including a GOT) are connected to the same segment, the network load may increase, and the communication speed may slow down between the GOT and a programmable controller. The following actions can improve the communication performance.
  - Use a switching hub.
  - Use the high-speed 100BASE-TX (100Mbps).
  - Reduce the GOT monitoring points.
- When connecting GT16 to an equipment that meets the 10BASE (-T/2/5) standard, use the switching hub and operate in an environment where 10Mbps and 100Mbps can be mixed.

Precautions on setup

- When connecting a GOT to YOKOGAWA programmable controller, devices to be set for objects must be in the device range of YOKOGAWA programmable controller.
  When a device outside the device range is set for an object, an invalid value is displayed for the object. (The system alarm is not displayed).

Related Manuals

- For details of system configuration and connection cable
- For precautions and restrictions
- For outlined procedure and checking of MODBUS© /TCP connection

Chapter 29 in GOT1000 Series Connection Manual (SH-080532ENG)

- For controllers that can be monitored by GOT and accessible range

Chapter 2 in GT Designer2 Version2 Screen Design Manual (SH-080530ENG)

*1 For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

MEMO

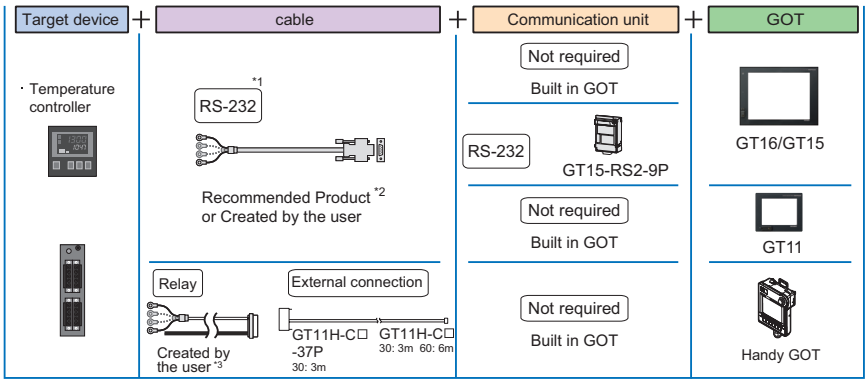
4.6 Temperature Controller

4.6.1 Connection type

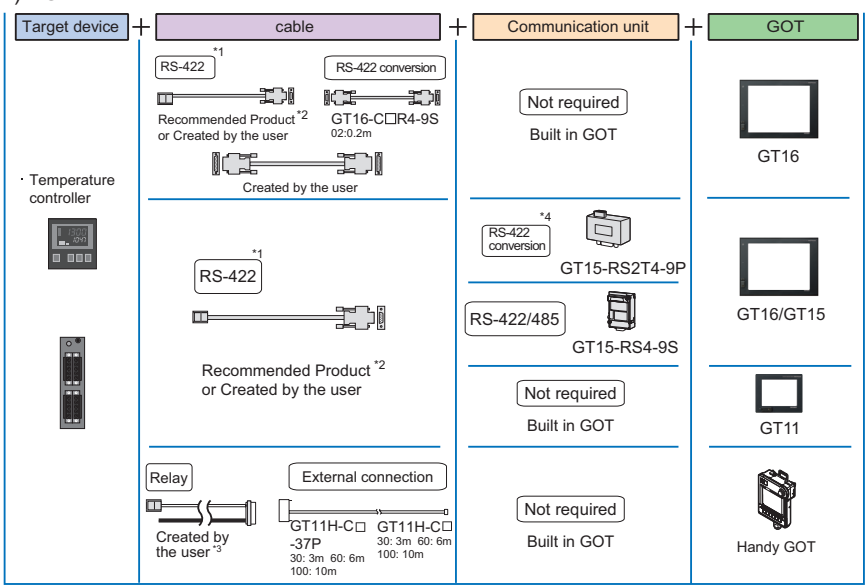
The following shows connection with a temperature controller. The available connection type and GOT differ according to the manufacturer. For details, refer to the section for each temperature controller.

System configuration

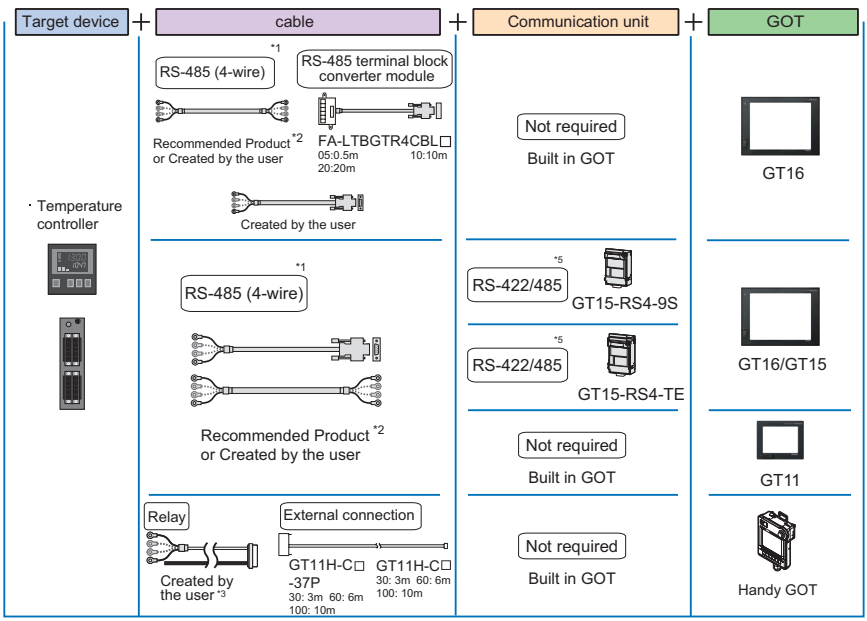
1) RS-232



2) RS-422



3) RS-485 (4-wire type)



*1: The terminal differs depending on the manufacturer of the temperature controller to be connected.

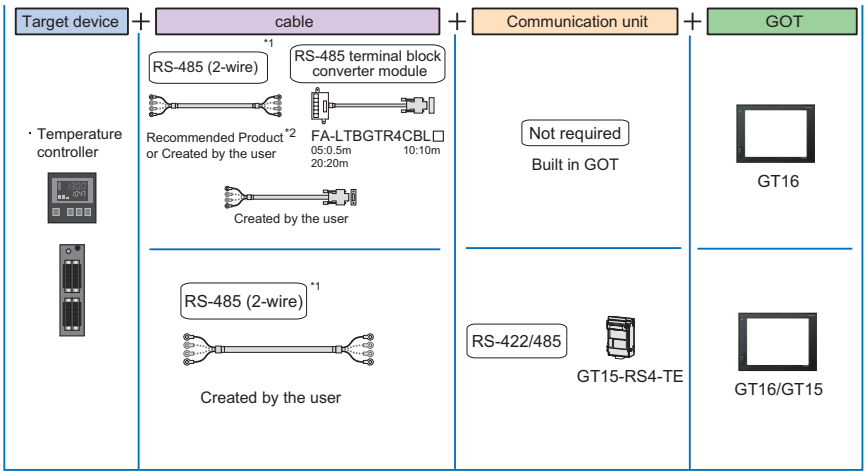
*2: Cables vary depending on the target devices.
For details, refer to 6.EQUIPMENT, SOFTWARE, AND MANUALS and GOT1000 Series Connection Manual.

*3: Required for using GT11H-C□-37P.

*4: Use GT15-RS4-9S for using GT155□.

*5: The available communication unit differs depending on the temperature controller connected.
For available communication units, refer to GOT1000 Series Connection Manual.

4) RS-485 (2-wire type)



*1: The terminal differs depending on the manufacturer of the temperature controller to be connected.

(Terminal block) (Modular type)

*2: Cables vary depending on the target devices.
For details, refer to 6.EQUIPMENT, SOFTWARE, AND MANUALS and GOT1000 Series Connection Manual.

4.6.2 OMRON temperature controller

For details of the system configuration, refer to "Connection type" in section 4.6.1.

Connectable GOT

GT16 GT15 GT11

Connectable models

Model		GT16/GT15			GT11		
		RS-485	RS-422	RS-232	RS-485	RS-422	RS-232
THERMAC NEO	E5AN	○ (2-wire type)	×	○ *1	×	×	○ *1
	E5EN	○ (2-wire type)	×	○ *1	×	×	○ *1
	E5CN	○ (2-wire type)	×	○ *1	×	×	○ *1
	E5GN	○ (2-wire type)	×	○ *1	×	×	○ *1
INPANEL NEO	E5ZN	○ (2-wire type)	×	○ *1	×	×	○ *1

*1 When the RS-485 interface of the temperature controller is used, use the RS-232/RS-485 converter.

The GOT model to be used differs depending on the connection type.

Series		Connection type	GOT model to be used
GT11		RS-232 or RS-422 connections	GT115□-Q□BD
		Bus connection	GT115□-Q□BDQ, GT115□-Q□BDA
	Handy GOT	RS-232 or RS-422 connections	GT115□HS-Q□BD

Precautions

■ Precautions on system

- When connecting a GOT to the OMRON temperature controller, set a terminating resistor for the temperature controller.
  For the GOT, set a terminating resistor with the DIP switches of the RS-422/485 serial communication unit.
- Clock setting of GOT
  The temperature controller does not have the clock function. Even though [Adjust] or [Broadcast] is set for the clock setting, the setting is invalid (not processed).

Related Manuals

- For details of system configuration and connection cable
- For precautions and restrictions
- For outlined procedure and checking of OMRON temperature controller connection

➤ Chapter 30 in GOT1000 Series Connection Manual (SH-080532ENG)

- For controllers that can be monitored by GOT and accessible range

➤ Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)

- For connection method with Handy GOT

➤ Chapter 28 in Handy GOT User's Manual (JY997D20101)

* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

4.6.3 SHINKO indicating controller

For details of the system configuration, refer to "Connection type" in section 4.6.1.

Connectable GOT

Connectable models

Series	Model	RS-485	RS-422	RS-232
ACS-13A series	ACS-13A □ / □, □, C5	○ (2-wire type)	×	○ *2
DCL-33A series	DCL-33A- □ /M, □, C5			
JC series	JCS-33A- □ / □□, C5			
	JCR-33A- □ / □□, C5			
	JCR-33A- □ / □□, C5			
JCM-33A series	JCR-33A- □ / □, □, C5			
FCR-100 series	FCR-13A- □ /M, C	×		○ *1
	FCR-13A- □ /M, C5			
	FCR-15A- □ /M, C			
	FCR-15A- □ /M, C5			
FCD-100 series	FCD-13A- □ /M, C			
	FCD-13A- □ /M, C5			
	FCD-15A- □ /M, C			
	FCD-15A- □ /M, C5			
FCR-23A series	FCR-23A- □ /M, C			
	FCR-23A- □ /M, C5			
PC-900 series	PC935- □ /M, C			
	PC935- □ /M, C5	○ (2-wire type)		
	PC955- □ /M, C	×		
	PC955- □ /M, C5	○ (2-wire type)		
PCD-300 series	PCD-33A- □ /M, C5			
FIR series	FIR-201-M,C	×		
	FIR-201-M,C5			
JIR-301-M series	JIR-301-M □, C5	○ (2-wire type)		○ *2

*1 A GOT can connect to only the indicating controller with RS-232 serial communication function.

*2 When the RS-485 interface of the indicating controller is used, use the RS-232/RS-485 converter.

The GOT model to be used differs depending on the connection type.

Series		Connection type	GOT model to be used
GT11		RS-232 or RS-422 connections	GT115□-Q□BD
		Bus connection	GT115□-Q□BDQ, GT115□-Q□BDA
	Handy GOT	RS-232 or RS-422 connections	GT115□HS-Q□BD

Precautions

Precautions on system

- Clock setting of GOT
  The indicating controller does not have the clock function. Even though [Adjust] or [Broadcast] is set for the clock setting, the setting is invalid (not processed).

Other precautions

- Setting station No. of indicating controller
  Make sure that the indicating controller corresponding to the station No. set for the host address exists in the system configuration.

Related Manuals

• For details of system configuration and connection cable • For precautions and restrictions • For outlined procedure and checking of SHINKO indicating controller connection	Chapter 31 in GOT1000 Series Connection Manual (SH-080532ENG)
• For controllers that can be monitored by GOT and accessible range	Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)
• For connection method with Handy GOT	Chapter 29 in Handy GOT User's Manual (JY997D20101)

* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

4.6.4 CHINO controller

For details of the system configuration, refer to "Connection type" in section 4.6.1.

Connectable GOT

Connectable models

Series	Model	GT16/GT15			GT11		
		RS-485	RS-422	RS-232	RS-485	RS-422	RS-232
LT300 series	LT350, LT370	○ (2-wire type)	○	○ *1*2	×	○	○ *1*2
LT400 series	LT450, LT470	○ (2-wire type)	○	○ *1*2	×	○	○ *1*2
DZ1000 series	DZ1000*3	○ (2-wire type)	○	○ *1*2	×	○	○ *1*2
DZ2000 series	DZ2000*3	○ (2-wire type)	○	○ *1*2	×	○	○ *1*2
LT230 series	LT230	○ (2-wire type)	×	○ *1	×	×	○ *1
LT830 series	LT830	○ (2-wire type)	×	○ *1	×	×	○ *1
GT120 series	GT120	○ (2-wire type)	×	○ *1	×	×	○ *1

*1 When the RS-485 interface of the controller is used, use the RS-232/RS-485 converter.

*2 When the RS-422 interface of the controller is used, use the RS-232/RS-422 converter.

*3 Select a model for supporting the MODBUS® communication function.

The GOT model to be used differs depending on the connection type.

Series		Connection type	GOT model to be used
GT11		RS-232 or RS-422 connections	GT115□-Q□BD
		Bus connection	GT115□-Q□BDQ, GT115□-Q□BDA
	Handy GOT	RS-232 or RS-422 connections	GT115□HS-Q□BD

Precautions

Precautions on system

- When connecting a GOT to the CHINO controller, set a terminating resistor for the controller.
  For the GOT, set a terminating resistor with the DIP switches of the RS-422/485 serial communication unit.
  Set the GOT terminating resistor setting to on.
- Clock setting of GOT
  The controller does not have the clock function. Even though [Adjust] or [Broadcast] is set for the clock setting, the setting is invalid (not processed).

Other precautions

- Setting station No. of controller
  Make sure that the controller corresponding to the station No. set for the host address exists in the system configuration.

Related Manuals

• For details of system configuration and connection cable • For precautions and restrictions • For outlined procedure and checking of the CHINO controller connection	Chapter 32 in GOT1000 Series Connection Manual (SH-080532ENG)
• For controllers that can be monitored by GOT and accessible range	Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)
• For connection method with Handy GOT	Chapter 30 in Handy GOT User's Manual (JY997D20101)

* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

4.6.5 FUJI SYS temperature controller

For details of the system configuration, refer to "Connection type" in section 4.6.1.

Connectable GOT

Connectable models

Series	Model	GT16/GT15			GT11		
		RS-485	RS-422	RS-232	RS-485	RS-422	RS-232
PXR	PXR3	○ (2-wire type)	×	○ *1	×	×	○ *1
	PXR4	○ (2-wire type)	×	○ *1	×	×	○ *1
	PXR5	○ (2-wire type)	×	○ *1	×	×	○ *1
	PXR9	○ (2-wire type)	×	○ *1	×	×	○ *1
PXG	PXG4	○ (2-wire type)	×	○ *1	×	×	○ *1
	PXG5	○ (2-wire type)	×	○ *1	×	×	○ *1
	PXG9	○ (2-wire type)	×	○ *1	×	×	○ *1
PXH	PXH9	○ (2-wire type)	×	○ *1	×	×	○ *1

*1 When the RS-485 interface of the temperature controller is used, use the RS-232/RS-485 converter.

The GOT model to be used differs depending on the connection type.

Series		Connection type	GOT model to be used
GT11		RS-232 or RS-422 connections	GT115□-Q□BD
		Bus connection	GT115□-Q□BDQ, GT115□-Q□BDA
	Handy GOT	RS-232 or RS-422 connections	GT115□HS-Q□BD

Precautions

Precautions on system

- When connecting a GOT to the FUJI SYS temperature controller, set a terminating resistor for the temperature controller.
  For the GOT, set a terminating resistor with the DIP switches of the RS-422/485 serial communication unit.
- Clock setting of GOT
  The temperature controller does not have the clock function. Even though [Adjust] or [Broadcast] is set for the clock setting, the setting is invalid (not processed).

Precautions on setup

- FIX processing of temperature controller
  Do not turn off the temperature controller during FIX processing. Doing so may damage the data stored in a nonvolatile memory, resulting in the failure of the temperature controller.

Other precautions

- Setting station No. of temperature controller
  Make sure that the temperature controller corresponding to the station No. set for the host address exists in the system configuration.

Related Manuals

- For details of system configuration and connection cable
- For precautions and restrictions
- For outlined procedure and checking of FUJI SYS temperature controller connection

Chapter 33 in GOT1000 Series Connection Manual (SH-080532ENG)

- For controllers that can be monitored by GOT and accessible range

Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)

- For connection method with Handy GOT

Chapter 32 in Handy GOT User's Manual (JY997D20101)

* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

4.6.6 YAMATAKE temperature controller

For details of the system configuration, refer to "Connection type" in section 4.6.1.

Connectable GOT

Connectable models

Model		GT16/GT15			GT11		
		RS-485	RS-422	RS-232	RS-485	RS-422	RS-232
SDC	SDC20/21	○ (4-wire type)	×	○ *1	○ (4-wire type)	×	○ *1
	SDC30/31	○ (4-wire type)	×	○ *1	○ (4-wire type)	×	○ *1
	SDC40A/40B/40G	○ (4-wire type)	×	○ *1	○ (4-wire type)	×	○ *1
	SDC15	○ (2-wire type)	×	○ *1	×	×	○ *1
	SDC25/26	○ (2-wire type)	×	○ *1	×	×	○ *1
	SDC35/36	○ (2-wire type)	×	○ *1	×	×	○ *1
DMC	DMC10	○ (2-wire type)	×	○ *1	×	×	○ *1

*1 When the RS-485 interface of the temperature controller is used, use the RS-232/RS-485 converter.

The GOT model to be used differs depending on the connection type.

Series		Connection type	GOT model to be used
GT11		RS-232 or RS-422 connections	GT115□-Q□BD
		Bus connection	GT115□-Q□BDQ, GT115□-Q□BDA
	Handy GOT	RS-232 or RS-422 connections	GT115□HS-Q□BD

Precautions

■ Precautions on system

- When connecting a GOT to the YAMATAKE temperature controller, connect a terminating resistor for the temperature controller.
  For the GOT, set a terminating resistor with the DIP switches of the RS-422/485 serial communication unit.
- Clock setting of GOT
  The temperature controller does not have the clock function. Even though [Adjust] or [Broadcast] is set for the clock setting, the setting is invalid (not processed).

Related Manuals

- For details of system configuration and connection cable
- For precautions and restrictions
- For outlined procedure and checking of YAMATAKE temperature controller connection

→ Chapter 34 in GOT1000 Series Connection Manual (SH-080532ENG)

- For controllers that can be monitored by GOT and accessible range

→ Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)

- For connection method with Handy GOT

→ Chapter 31 in Handy GOT User's Manual (JY997D20101)

* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

4.6.7 YOKOGAWA temperature controller

For details of the system configuration, refer to "Connection type" in section 4.6.1.

Connectable GOT

Connectable models

Series	Model	GT16/GT15			GT11		
		RS-485	RS-422	RS-232	RS-485	RS-422	RS-232
GREEN series	UT320 UT321 UT350 UT351 UT420 UT450 UT520 UT550 UT551 UT750 UP350 UP351 UP550 UP750 UM330 UM331 UM350 UM351 US1000	○ (2-wire type/4-wire type)	×	○ *1	○ (4-wire type)	×	○ *1
UT-100 series	UT130 UT150 UT152 UT155 UP150	○ (2-wire type)			×		
UT-2000 series	UT2400 UT2800	○ (4-wire type)			○ (4-wire type)		

*1 When the RS-485 interface of the temperature controller is used, use the RS-232/RS-485 converter.

The GOT model to be used differs depending on the connection type.

Series		Connection type	GOT model to be used
GT11		RS-232 or RS-422 connections	GT115□-Q□BD
		Bus connection	GT115□-Q□BDQ, GT115□-Q□BDA
	Handy GOT	RS-232 or RS-422 connections	GT115□HS-Q□BD

Precautions

Precautions on system

- When connecting a GOT to the YOKOGAWA temperature controller, connect a terminating resistor for the temperature controller.
  For the GOT, set a terminating resistor with the DIP switches of the RS-422/485 serial communication unit.
- Clock setting of GOT
  The temperature controller does not have the clock function. Even though [Adjust] or [Broadcast] is set for the clock setting, the setting is invalid (not processed).

Related Manuals

• For details of system configuration and connection cable • For precautions and restrictions • For outlined procedure and checking of YOKOGAWA temperature controller connection	Chapter 35 in GOT1000 Series Connection Manual (SH-080532ENG)
• For controllers that can be monitored by GOT and accessible range	Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)
• For connection method with Handy GOT	Chapter 33 in Handy GOT User's Manual (JY997D20101)

* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

4.6.8 RKC temperature controller

For details of the system configuration, refer to "Connection type" in section 4.6.1.

Connectable GOT

Connectable models

Series	Model	GT16/GT15			GT11		
		RS-485	RS-422	RS-232	RS-485	RS-422	RS-232
SR Mini HG Series	H-PCP-J	○ (2-wire type)	○	○	×	○	○
	H-PCP-A, CH-PCP-B	×	○	○	×	○	○
SRZ series	Z-TIO, Z-DIO	○ (2-wire type)*3	○ *2	○ *1	×	○ *2	○ *1
CB series (Products specified for MODBUS® communication)	CB100/400/500 /700/900	○ (2-wire type)	×	○ *1	×	×	○ *1

*1 When the RS-485 interface of the temperature controller is used, use the RS-232/RS-485 converter.
*2 Use Communication Extension Module (Z-COM).
*3 Use Communication Extension Module (Z-COM) according to the system configuration.

The GOT model to be used differs depending on the connection type.

Series		Connection type	GOT model to be used
GT11		RS-232 or RS-422 connections	GT115□-Q□BD
		Bus connection	GT115□-Q□BDQ, GT115□-Q□BDA
	Handy GOT	RS-232 or RS-422 connections	GT115□HS-Q□BD

Precautions

■ Precautions on system

● Clock setting of GOT
The temperature controller does not have the clock function. Even though [Adjust] or [Broadcast] is set for the clock setting, the setting is invalid (not processed).

■ Precautions on setup

● When using RS-422 conversion unit
Set [Communication Setting] in the utility so that the 5VDC power is supplied to the RS-422 conversion unit via the RS-232 interface of the GOT.

● Polar difference between GOT and RKC product
For signal names, poles A and B are reversed between a GOT and an RKC product.

Related Manuals

- For details of system configuration and connection cable
- For precautions and restrictions
- For outlined procedure and checking of RKC temperature controller connection

→ Chapter 36 in GOT1000 Series Connection Manual (SH-080532ENG)

- For controllers that can be monitored by GOT and accessible range

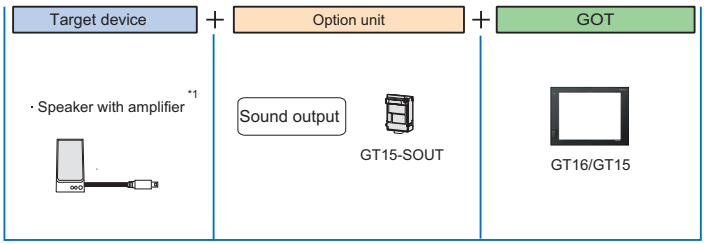
→ Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)

- For connection method with Handy GOT

→ Chapter 34 in Handy GOT User's Manual (JY997D20101)

* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

System configuration



*1: Use a speaker with amplifier that is compliant with the following specifications.

Item	Specification
Sound output terminal	For connecting a external speaker, 1 channel for L/R respectively (2Vp-p, 0.4mW (for the rated voltage of 10kΩ))
Applicable jack	3.5 stereo mini jackϕ
Playable file	Windows WAV format 8.000KHz, 16-bit-monoral (8 sec./sound file)

Precautions

Other precautions

- Setting of sound output function with GT Designer2
  Set the sound file with GT Designer2 before connecting a speaker with amplifier to the GOT.

Related Manuals

- For details of system configuration and connection cable
- For precautions and restrictions
- For outlined procedure and checking of the sound output

Chapter 41 in GOT1000 Series Connection Manual (SH-080532ENG)

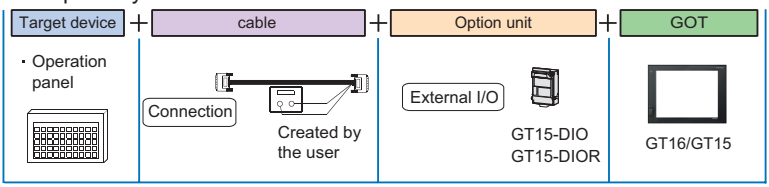
- For controllers that can be monitored by GOT and accessible range

Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)

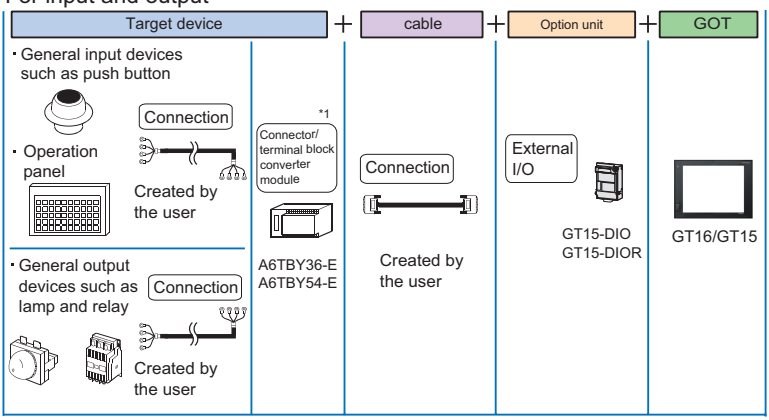
* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

System configuration

For input only



For input and output



*1: When the connector/terminal block converter module is used, the input points are up to 64 points.

Precautions

Other precautions

- Setting of external I/O function with GT Designer2
  Set the operation panel with GT Designer2 before connecting an external I/O device.

Related Manuals

- For details of system configuration and connection cable
- For precautions and restrictions
- For outlined procedure and checking of external I/O

→ Chapter 42 in GOT1000 Series Connection Manual (SH-080532ENG)

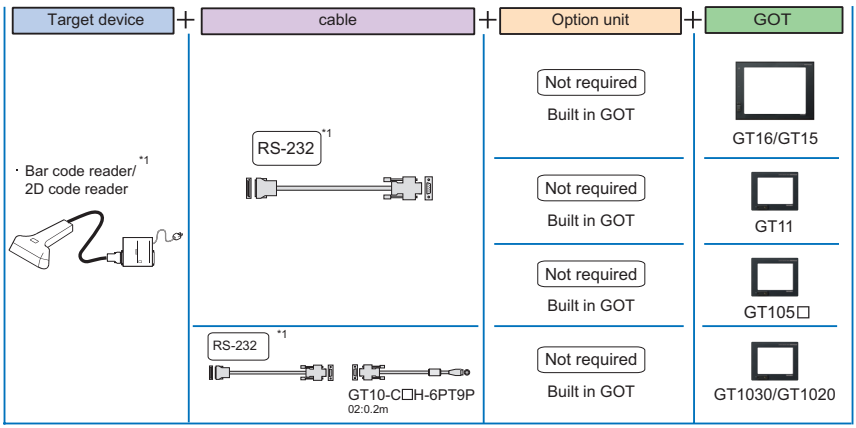
- For controllers that can be monitored by GOT and accessible range

→ Chapter 2 in GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) (SH-080530ENG)

* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

4.7.3 Bar code reader connection

System configuration



*1: For connectable bar code readers/2D code readers and system devices, refer to the following TECHNICAL BULLETIN.
· List of valid devices applicable for GOT1000series (T10-0039)

For TECHNICAL BULLETIN, access the MITSUBISHI ELECTRIC FA NETWORK SERVICE website.
http://wwwf2.mitsubishielectric.co.jp/english/index.html

Precautions

Other precautions

- Setting of bar code function with GT Designer2
  Set the bar code function and system information with GT Designer2 before connecting a bar code reader.

Related Manuals

- For details of system configuration and connection cable
- For precautions and restrictions
- For outlined procedure and checking of bar code reader connection

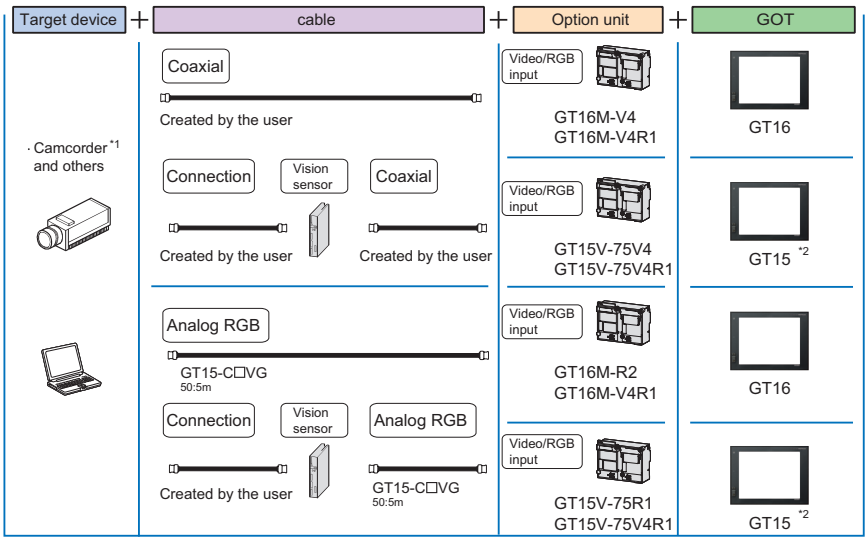
➤ Chapter 43 in GOT1000 Series Connection Manual (SH-080532ENG)

* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

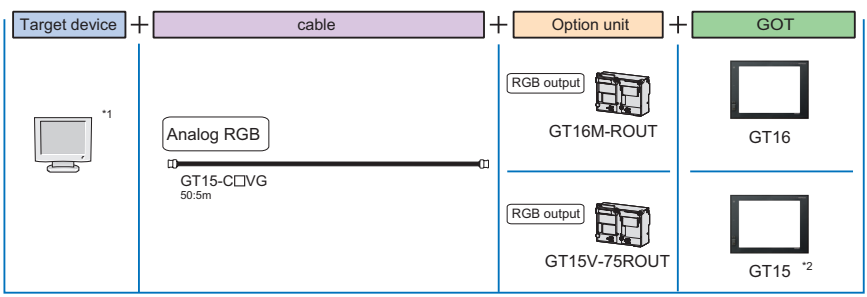
MEMO

System configuration

1) Displaying video image on GOT



2) Displaying GOT screen on external monitor



*1: For connectable camcorder and external monitor types, refer to the following TECHNICAL BULLETIN.
· List of valid devices applicable for GOT1000series (T10-0039)

For TECHNICAL BULLETIN, access the MITSUBISHI ELECTRIC FA NETWORK SERVICE website.
http://wwwf2.mitsubishielectric.co.jp/english/index.html

*2: Only GT1585V and GT1575V are supported.

Precautions

Precautions on setup

- Connecting to personal computer
  When connecting a personal computer, ground the ground cable of the personal computer.

Other precautions

- Power supply of camcorder
  Depending on the camcorder type, a programmable controller and GOT may malfunction due to noise because of the power supply cable for a camcorder. In this case, attach the following line filter to the power supply line.
  Recommended line filter: ZHC2203-11 manufactured by TDK Corporation (or equivalent products)
- Power supply of vision sensor
  When using a camcorder via the vision sensor, a power supply unit of the vision sensor is required according to the vision sensor type to be used.
- Selecting output of video signal
  The video signal can be output from both a power supply unit of a camcorder and a camcorder according to the camcorder and system to be used.
  When video signals are output from both the camcorder and power supply unit, the voltage levels for some of the signals are reduced and images may not normally be displayed. In this case, output signals only from the camcorder.
- Powering on camcorder
  Power on the camcorder simultaneously with a GOT.

Related Manuals

- For details of system configuration and connection cable
- For precautions and restrictions
- For outlined procedure and checking of video/RGB connection

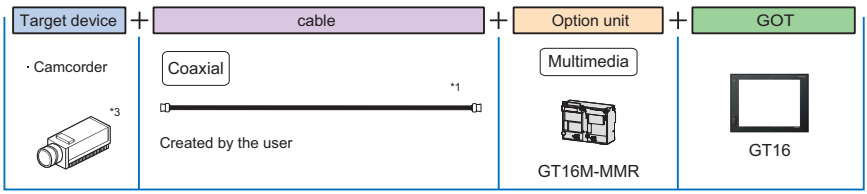
Chapter 44 in GOT1000 Series Connection Manual (SH-080532ENG)

* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

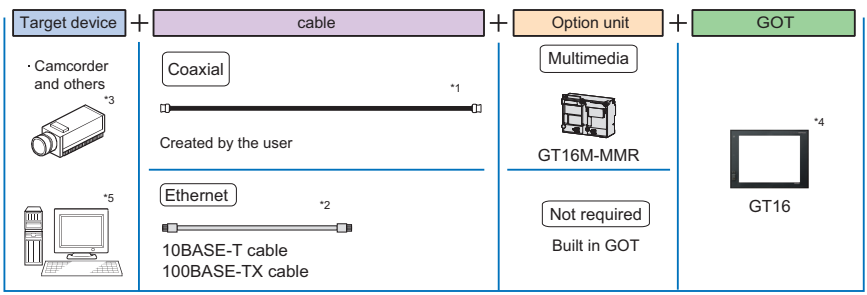
4.7.5 Multimedia connection

System configuration

1) Saving video image and displaying it on GOT



2) Sending video image to personal computer



*1: The cable length differs depending on the specification of the camcorder used by the user.
*2: The target device of an Ethernet cable differs depending on the Ethernet network system configuration to be used. Connect the cable to the system devices, including Ethernet modules, hubs, and transceivers, according to the Ethernet network system to be used.
*3: For connectable camcorders, refer to the following TECHNICAL BULLETIN.
· List of valid devices applicable for GOT1000series (T10-0039)

For TECHNICAL BULLETIN, access the MITSUBISHI ELECTRIC FA NETWORK SERVICE website.
http://wwwf2.mitsubishielectric.co.jp/english/index.html

*4: When connecting GT16 to an equipment that meets the 10BASE (-T/2/5) standard, use the switching hub and operate in an environment where 10Mbps and 100Mbps can be mixed.
*5: Install the multimedia interaction tool before use.
·For details of the multimedia interaction tool, refer to the following manual.
GT Designer2 Version□ Screen Design Manual

Precautions

Other precautions

- When the multimedia function is used
  The multimedia function and the video/RGB function are installed exclusively.
  Select either of them to use.
- CF card on the multimedia unit
  For the CF card that can be inserted into the multimedia unit, formatting in FAT32 is recommended.
  If the CF card formatted in FAT16 is inserted, the following phenomena may occur.
  - Reading, writing or saving of movie files takes time.
  - When a movie file is played, the movie momentarily looks like as if it stopped.
- Ethernet cable connection
  When using the Ethernet cable, the interface on the multimedia unit cannot be used.
  Use the Ethernet interface on the GOT.

Related Manuals

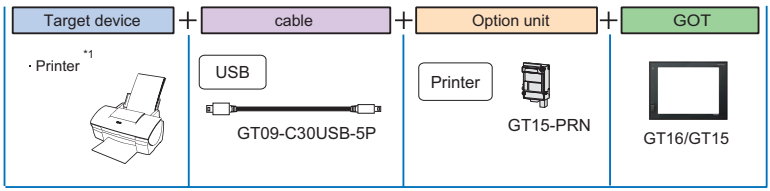
- For details of system configuration and connection cable
- For precautions and restrictions
- For outlined procedure and checking of multimedia connection

Chapter 45 in GOT1000 Series Connection Manual (SH-080532ENG)

* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

4.7.6 Printer connection

System configuration



*1: Use a printer compatible with PictBridge.
A printer, which is not compatible with PictBridge, cannot be used.

Precautions

Other precautions

- Connecting or disconnecting USB cable during printing
  When the USB cable is disconnected during printing, some printers hang depending on the PictBridge compatible printer model.
  In this case, turn on the main power of the printer again and reboot the printer.
- When printer is disabled
  During initialization at power-on of a PictBridge compatible printer, some models of the printers notify a GOT that the printer is enabled.
  For the printer models, when printing is started with the GOT, an error may occur in the printer, resulting in printing failures.
  When printing is disabled, restart the printer with the following procedure.
  1) Disconnect the USB cable from the printer.
  2) Turn off the printer.
  3) Disconnect the power cable of the printer and completely stop the printer.
  4) Connect the power cable to the printer.
  5) Turn on the printer and wait until initialization on the printer is completed.
  6) Connect the USB cable to the printer.

Related Manuals

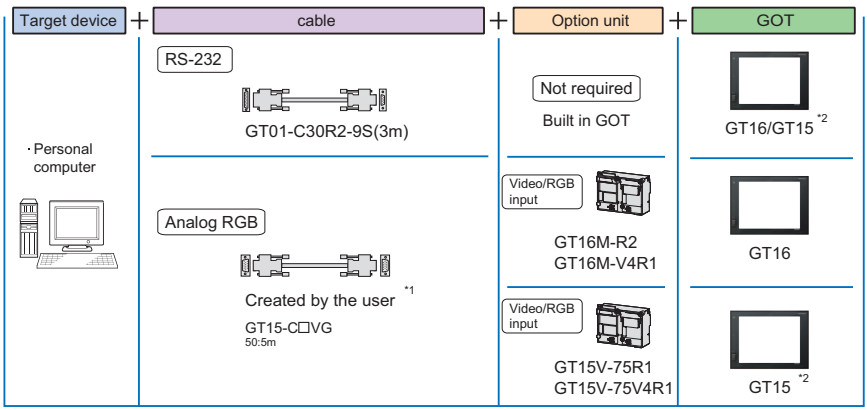
- For details of system configuration and connection cable
- For precautions and restrictions
- For outlined procedure and checking of printer connection

Chapter 46 in GOT1000 Series Connection Manual (SH-080532ENG)

* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

System configuration

1) Displaying video image on GOT



*1: The cable length differs depending on the specification of the personal computer to be used. Use the cable that is compatible with the personal computer to be used.
*2: Only GT1585V and GT1575V are available.

Precautions

Other precautions

- Personal computer side setting
  Before using the remote personal computer operation function, install the remote personal computer operation driver on the personal computer.
  After the driver installation, check that the driver is correctly installed.

Related Manuals

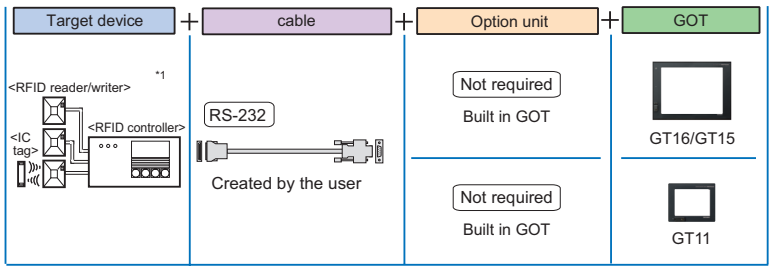
- For details of system configuration and connection cable
- For precautions and restrictions
- For outlined procedure and checking of remote personal computer operation connection

Chapter 47 in GOT1000 Series Connection Manual (SH-080532ENG)

* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

4.7.8 RFID connection

System configuration



*1: For connectable RFID controllers and system equipment, refer to the following TECHNICAL BULLETIN.
List of valid devices applicable for GOT1000 series (GOT-A-0010)

Visit the MITSUBISHI ELECTRIC FA NETWORK SERVICE website (MELFANSweb) to refer to the TECHNICAL BULLETIN.
http://wwwf2.mitsubishielectric.co.jp/melfansweb/english/index.html

Precautions

Other precautions

- RFID function setting on GT Designer2
  Set the RFID function and system information with GT Designer2 before connecting a RFID controller.
- Communication in multiple RFID readers/writers connection
  When connecting multiple RFID readers/writers, some controllers may communicate with each RFID reader/writer.
  For communicating the RFID controller with the each RFID reader/writer, set an interlock so that the RFID controller does not communicate with RFID readers/writers until the executing communication is completed.

Related Manuals

- For details of system configuration and connection cable
- For precautions and restrictions
- For outlined procedure and checking of RFID connection

Chapter 48 in GOT1000 Series Connection Manual (SH-080532ENG)

* For restrictions and precautions on controllers connected to a GOT, refer to the manual for each controller.

MEMO

4.8 Precautions

●Precautions on setup

(1) When installing communication unit or connecting cable
Shut off all phases of the GOT power.

(2) When using RS-422 conversion unit
Set [Communication Setting] in the utility so that the 5VDC power is supplied to the RS-422 conversion unit via the RS-232 interface of the GOT.

5. COMPLIANCE WITH OVERSEAS STANDARDS

This chapter describes the compliance with overseas standards for the GOT, communication interface, and option.

5. COMPLIANCE WITH OVERSEAS STANDARDS

The GOT is compliant with the following safety standards, including UL standard.
For the latest compliance with overseas standards, access the MITSUBISHI ELECTRIC FA NETWORK SERVICE website.
http://wwwf2.mitsubishielectric.co.jp/english/index.html

UL:Underwriters Laboratories

EMC : EMC Directive
LVD : Low Voltage Directive

Product name		Model	UL/cUL	CE	
				EMC	LVD
GOT main unit	GT16	GT1695M-XTBA	△	△	△
		GT1695M-XTBD	△	△	-
		GT1685M-STBA	△	△	△
		GT1685M-STBD	△	△	-
	GT15	GT1595-XTBA	○	○	○
		GT1595-XTBD	○	○	-
		GT1585V-STBA	○	○	○
		GT1585V-STBD	○	○	-
		GT1585-STBA	○	○	○
		GT1585-STBD	○	○	-
		GT1575V-STBA	○	○	○
		GT1575V-STBD	○	○	-
		GT1575-STBA	○	○	○
		GT1575-STBD	○	○	-
		GT1575-VTBA	○	○	○
		GT1575-VTBD	○	○	-
		GT1575-VNBA	○	○	○
		GT1575-VNBD	○	○	-
		GT1572-VNBA	○	○	○
		GT1572-VNBD	○	○	-
		GT1565-VTBA	○	○	○
		GT1565-VTBD	○	○	-
		GT1562-VNBA	○	○	○
		GT1562-VNBD	○	○	-
		GT1555-VTBD	○	○	-
		GT1555-QTBD	○	○	-
		GT1555-QSBD	○	○	-
		GT1550-QLBD	○	○	-

○: Compliant △: Soon to be compliant ×: Not compliant -: Not applied

Product name		Model	UL/cUL	CE	
				EMC	LVD
GOT main unit	GT11	GT1155-QTBDQ	○	○	-
		GT1155-QTBDA	○	○	-
		GT1155-QTBD	○	○	-
		GT1155-QSBDQ	○	○	-
		GT1155-QSBDA	○	○	-
		GT1155-QSBD	○	○	-
		GT1155HS-QSBD	○	○	-
		GT1150-QLBDQ	○	○	-
		GT1150-QLBDA	○	○	-
		GT1150-QLBD	○	○	-
		GT1150HS-QLBD	○	○	-
	GT10	GT1055-QSBD	△	○	-
		GT1050-QBBD	△	○	-
		GT1030-LBD	○	○	-
		GT1030-LBDW	○	○	-
		GT1030-LBD2	○	○	-
		GT1030-LBDW2	○	○	-
		GT1030-LWD	○	○	-
		GT1030-LWDW	○	○	-
		GT1030-LWD2	○	○	-
		GT1030-LWDW2	○	○	-
		GT1020-LBD	○	○	-
		GT1020-LBDW	○	○	-
		GT1020-LBD2	○	○	-
		GT1020-LBDW2	○	○	-
		GT1020-LBL	○	○	-
		GT1020-LBLW	○	○	-
		GT1020-LWD	○	○	-
		GT1020-LWDW	○	○	-
		GT1020-LWD2	○	○	-
		GT1020-LWDW2	○	○	-
		GT1020-LWL	○	○	-
		GT1020-LWLW	○	○	-
Communica-tion unit	Bus connection unit	GT15-QBUS	○	○	-
		GT15-QBUS2	○	○	-
		GT15-ABUS	○	○	-
		GT15-ABUS2	○	○	-
		GT15-75QBUSL	○	○	-
		GT15-75QBUS2L	○	○	-
		GT15-75ABUSL	○	○	-
		GT15-75ABUS2L	○	○	-

○: Compliant △: Soon to be compliant ×: Not compliant -: Not applied

Product name		Model	UL/cUL	CE	
				EMC	LVD
Communication unit	Serial communication unit	GT15-RS2-9P	○	○	-
		GT15-RS4-9S	○	○	-
		GT15-RS4-TE	○	○	-
	RS-422 conversion unit	GT15-RS2T4-9P	○	○	-
		GT15-RS2T4-25P	○	○	-
	Ethernet communication unit	GT15-J71E71-100	○	○	-
	MELSECNET/H communication unit	GT15-J71LP23-25	○	○	-
		GT15-J71BR13	○	○	-
	CC-Link communication unit	GT15-J61BT13	○	○	-
	CC-Link IE controller network communication unit	GT15-J71GP23-SX	○	○	-
Option unit	Printer unit	GT15-PRN	○	○	-
	Multimedia unit	GT16M-MMR	△	△	-
	Video input unit	GT15V-75V4	○	○	-
		GT16M-V4	△	△	-
	RGB input unit	GT15V-75R1	○	○	-
		GT16M-R2	△	△	-
	Video/RGB input unit	GT15V-75V4R1	○	○	-
		GT16M-V4R1	△	△	-
	RGB output unit	GT15V-75ROUT	○	○	-
		GT16M-ROUT	△	△	-
	CF card unit	GT15-CFCD	△	△	-
	CF card extension unit	GT15-CFEX-C08SET	△	△	-
	Sound output unit	GT15-SOUT	○	○	-
	External I/O unit	GT15-DIO	○	○	-
		GT15-DIOR	○	○	-
	Backlight	GT16-90XLTT	*1	*1	*1
		GT16-80SLTT	*1	*1	*1
		GT15-90XLTT	*1	*1	*1
		GT15-80SLTT	*1	*1	*1
		GT15-70SLTT	*1	*1	*1
		GT15-70VLTT	*1	*1	*1
		GT15-70VLTN	*1	*1	*1
		GT15-60VLTT	*1	*1	*1
		GT15-60VLTN	*1	*1	*1

○: Compliant △: Soon to be compliant ×: Not compliant -: Not applied

Product name		Model	UL/cUL	CE	
				EMC	LVD
Option unit	Option function board	GT16-MESB	△	△	-
		GT15-FNB	○	○	-
		GT15-QFNB	○	○	-
		GT15-QFNB16M	○	○	-
		GT15-QFNB32M	○	○	-
		GT15-QFNB48M	○	○	-
		GT11-50FNB	×	○	-
		GT15-MESB48M	○	○	-
	GT10 memory loader	GT10-LDR	×	-	-
	GT10 memory board	GT10-50FMB	×	△	-
	Protective sheet	GT16-90PSCB	△	-	-
		GT16-90PSGB	△	-	-
		GT16-90PSCW	△	-	-
		GT16-90PSGW	△	-	-
		GT16-80PSCB	△	-	-
		GT16-80PSGB	△	-	-
		GT16-80PSCW	△	-	-
		GT16-80PSGW	△	-	-
		GT15-90PSCB	○	-	-
		GT15-90PSGB	○	-	-
		GT15-90PSCW	○	-	-
		GT15-90PSGW	○	-	-
		GT15-80PSCB	○	-	-
		GT15-80PSGB	○	-	-
		GT15-80PSCW	○	-	-
		GT15-80PSGW	○	-	-
		GT15-70PSCB	○	-	-
		GT15-70PSGB	○	-	-
		GT15-70PSCW	○	-	-
		GT15-70PSGW	○	-	-
		GT15-60PSCB	○	-	-
		GT15-60PSGB	○	-	-
		GT15-60PSCW	○	-	-
		GT15-60PSGW	○	-	-
		GT15-50PSCB	○	-	-
		GT15-50PSGB	○	-	-
		GT15-50PSCW	○	-	-
		GT15-50PSGW	○	-	-

*1 Compliant with the standard with the product built in the GOT.

○: Compliant △: Soon to be compliant ×: Not compliant -: Not applied

Product name		Model	UL/cUL	CE	
				EMC	LVD
Option	Protective sheet	GT11-50PSCB	×	-	-
		GT11-50PSGB	×	-	-
		GT11-50PSCW	×	-	-
		GT11-50PSGW	×	-	-
		GT11H-50PSC	×	-	-
		GT10-50PSCB	×	-	-
		GT10-50PSGB	×	-	-
		GT10-50PSCW	×	-	-
		GT10-50PSGW	×	-	-
		GT10-30PSCB	×	-	-
		GT10-30PSGB	×	-	-
		GT10-30PSCW	×	-	-
		GT10-30PSGW	×	-	-
		GT10-20PSCB	×	-	-
		GT10-20PSGB	×	-	-
		GT10-20PSCW	×	-	-
		GT10-20PSGW	×	-	-
	USB environmental protection cover	GT16-UCOV	*1	-	-
		GT15-UCOV	*1	-	-
		GT11-50UCOV	*1	-	-
	Protective cover for oil	GT05-90PCO	×	-	-
		GT05-80PCO	×	-	-
		GT05-70PCO	×	-	-
		GT05-60PCO	×	-	-
		GT05-50PCO	×	-	-
	Stand	GT15-90STAND	-	-	-
		GT15-80STAND	-	-	-
		GT15-70STAND	-	-	-
		GT15-50STAND	-	-	-
		GT05-50STAND	-	-	-
	CF card	GT05-MEM-32MC	○	○	-
		GT05-MEM-64MC	○	○	-
		GT05-MEM-128MC	○	○	-
		GT05-MEM-256MC	○	○	-
	Memory card adaptor	GT05-MEM-ADPC	○	-	-
	Attachment	GT15-70ATT-98	-	-	-
		GT15-70ATT-87	-	-	-
		GT15-60ATT-97	-	-	-
		GT15-60ATT-96	-	-	-
		GT15-60ATT-87	-	-	-
		GT15-60ATT-77	-	-	-
		GT15-50ATT-95W	-	-	-
		GT15-50ATT-85	-	-	-

*1 Compliant with the standard with the product built in the GOT.

○: Compliant △: Soon to be compliant ×: Not compliant -: Not applied

6. EQUIPMENT, SOFTWARE, AND MANUALS

This chapter describes equipment, software, and manuals related to the GOT.

6. EQUIPMENT, SOFTWARE, AND MANUALS

Main unit model name

GT16 9 5 M - X T B A □ □

Code	Screen size
9	15"
8	12.1"
7	10.4"
6	8.4"
5	5.7"
3	4.5"
2	3.7"

Code	Display colors
5	256 colors or more
2	16 colors
0	Monochrome

Code	Mounting type
V	Compatible with video/RGB
None	Panel mount type
HS	Handy type
M	Compatible with multimedia & Video/RGB

Code	Resolution
X	XGA (1024×768 dots)
S	SVGA (800×600 dots)
V	VGA (640×480 dots)
Q	QVGA (320×240 dots)
None	(288×96 dots) (160×64 dots)

Code	Display device
T	TFT color (high brightness, wide viewing angle)
N	TFT color
S	STN color
B	STN monochrome (blue/white)
L	STN monochrome

Code	Power supply
A	100 to 240VAC
D	24VDC
L	5VDC

Code	Communication interface
Q*1	With built-in bus connection interface for QCPU (Q mode)/motion controller CPU (Q series)
A*1	With built-in bus connection interface for QnA/ACPU/motion controller CPU (A series)
2*2	With built-in RS-232
None*2	With built-in RS-422

*1 : GT115□-Q□-BDQ and GT115□-Q□-BDA only
*2 : GT10 only

GT16	A variety of functions integrated functions, including Ethernet and multimedia
GT15	A wide range of applications from networking to standalone use
GT11	Standard model with basic functions for standalone use
GT10	Packed with the functionality necessary for a HMI

Code	main unit frame
B	Black
W	White

Code	GT10 backlight
W	White backlight
None	Green backlight

* For inquiries relating to products which conform to UL, cUL, and CE directives, please contact your local sales office.

GOT main units

Model name			Screen size [resolution]	Display		Display colors (number of colors)		Power supply	Memory size	Remarks
GT16	GT1695	GT1695M-XTBA (NEW)	15" XGA [1024×768 dots]	TFT color LCD (high brightness, wide viewing angle)		65536 colors		100-240VAC	15MB	Compatible with multimedia & Video/RGB
		GT1695M-XTBD (NEW)						24VDC		
	GT1685	GT1685M-STBA (NEW)	12.1" SVGA [800×600 dots]	TFT color LCD (high brightness, wide viewing angle)		65536 colors		100-240VAC	15MB	Compatible with multimedia & Video/RGB
		GT1685M-STBD (NEW)						24VDC		
GT15	GT1595	GT1595-XTBA	15" XGA [1024×768 dots]	TFT color LCD (high brightness, wide viewing angle)		65536 colors		100-240VAC	9MB	—
		GT1595-XTBD						24VDC		
	GT1585	GT1585V-STBA	12.1" SVGA [800×600 dots]	TFT color LCD (high brightness, wide viewing angle)		65536 colors		100-240VAC	9MB	Compatible with Video/RGB
		GT1585V-STBD						24VDC		
		GT1585-STBA		TFT color LCD (high brightness, wide viewing angle)				100-240VAC		—
		GT1585-STBD						24VDC		
	GT157□	GT1575V-STBA	10.4" SVGA [800×600 dots]	TFT color LCD (high brightness, wide viewing angle)		65536 colors		100-240VAC	9MB	Compatible with Video/RGB
		GT1575V-STBD						24VDC		
		GT1575-STBA		TFT color LCD (high brightness, wide viewing angle)				100-240VAC		—
		GT1575-STBD						24VDC		
		GT1575-VTBA	10.4" VGA [640×480 dots]	TFT color LCD (high brightness, wide viewing angle)		65536 colors		100-240VAC	9MB	
		GT1575-VTBD						24VDC		
		GT1575-VNBA		TFT color LCD		256 colors		100-240VAC	5MB	
		GT1575-VNBD						24VDC		
		GT1572-VNBA		TFT color LCD		16 colors		100-240VAC	5MB	
		GT1572-VNBD						24VDC		
	GT156□	GT1565-VTBA	8.4" VGA [640×480 dots]	TFT color LCD (high brightness, wide viewing angle)		65536 colors		100-240VAC	9MB	—
		GT1565-VTBD						24VDC		
		GT1562-VNBA		TFT color LCD		16 colors		100-240VAC	5MB	
		GT1562-VNBD						24VDC		
	GT155□	GT1555-VTBD	5.7" VGA [640×480 dots]	TFT color LCD (high brightness, wide viewing angle)		65536 colors		24VDC	9MB	—
		GT1555-QTBD	5.7" QVGA [320×240 dots]	STN color LCD		4096 colors				
		GT1555-QSBD		STN monochrome LCD		Monochrome (black/white) 16 gray scales				
		GT1550-QLBD								
GT11	GT1155	GT1155-QTBD	5.7" QVGA [320×240 dots]	TFT color LCD		256 colors		24VDC	3MB	—
		GT1155-QTBDQ								Dedicated to Q bus connection
		GT1155-QTBDA								Dedicated to A bus connection
		GT1155-QSBD		STN color LCD						—
		GT1155-QSBDQ								Dedicated to Q bus connection
		GT1155-QSBDA								Dedicated to A bus connection
	GT1150	GT1150-QLBD		STN monochrome LCD		Monochrome (black/white) 16 gray scales				—
		GT1150-QLBDQ								Dedicated to Q bus connection
		GT1150-QLBDA								Dedicated to A bus connection
	Handy GOT	GT1155HS-QSBD		STN color LCD		256 colors				—
		GT1150HS-QLBD		STN monochrome LCD		Monochrome (black/white) 16 gray scales				
GT10	GT105□	GT1055-QSBD (NEW)	5.7" QVGA [320×240 dots]	STN color LCD		256 colors		24VDC	3MB	—
		GT1050-QBBD (NEW)		STN monochrome LCD		Monochrome (blue/white) 16 gray scales				
	GT1030	GT1030-LBD	4.5" [288×96 dots]	STN monochrome LCD	Frame color: Black	Monochrome (black/white)	3-color LED (green, orange, red)	24VDC	1.5MB	Dedicated to RS-422 connection
		GT1030-LBD2								Dedicated to RS-232 connection
		GT1030-LBDW					3-color LED (white, pink, red)			Dedicated to RS-422 connection
		GT1030-LBDW2								Dedicated to RS-232 connection
		GT1030-LWD			White		3-color LED (green, orange, red)			Dedicated to RS-422 connection
		GT1030-LWD2								Dedicated to RS-232 connection
		GT1030-LWDW					3-color LED (white, pink, red)			Dedicated to RS-422 connection
		GT1030-LWDW2								Dedicated to RS-232 connection
	GT1020	GT1020-LBD	3.7" [160×64 dots]	STN monochrome LCD	Black	Monochrome (black/white)	3-color LED (green, orange, red)	24VDC	512KB	Dedicated to RS-422 connection
		GT1020-LBD2								Dedicated to RS-232 connection
		GT1020-LBL						5VDC		Dedicated to RS-422FX connection
		GT1020-LBDW					3-color LED (white, pink, red)	24VDC		Dedicated to RS-422 connection
		GT1020-LBDW2								Dedicated to RS-232 connection
		GT1020-LBLW						5VDC		Dedicated to RS-422FX connection
		GT1020-LWD	3.7" [160×64 dots]	STN monochrome LCD	White	Monochrome (black/white)	3-color LED (green, orange, red)	24VDC	512KB	Dedicated to RS-422 connection
		GT1020-LWD2								Dedicated to RS-232 connection
		GT1020-LWL						5VDC		Dedicated to RS-422FX connection
		GT1020-LWDW					3-color LED (white, pink, red)	24VDC		Dedicated to RS-422 connection
		GT1020-LWDW2								Dedicated to RS-232 connection
		GT1020-LWLW						5VDC		Dedicated to RS-422FX connection

Communication interface

Product name	Model name	Specifications		Applicable model				
				GT16	GT15	GT11	Handy GOT	GT10
Bus connection unit	GT15-QBUS	Bus connection (1ch) unit standard model for QCPU (Q mode)/motion controller CPU (Q series)		●	●	–	–	–
	GT15-QBUS2	Bus connection (2ch) unit standard model for QCPU (Q mode)/motion controller CPU (Q series)		●	●	–	–	–
	GT15-ABUS	Bus connection (1ch) unit standard model for QnA/ACPU/motion controller CPU (A series)		●	●	–	–	–
	GT15-ABUS2	Bus connection (2ch) unit standard model for QnA/ACPU/motion controller CPU (A series)		●	●	–	–	–
	GT15-75QBUSL	Bus connection (1ch) unit thin model*1 for QCPU (Q mode)/motion controller CPU (Q series)		●	●	–	–	–
	GT15-75QBUS2L	Bus connection (2ch) unit thin model*1 for QCPU (Q mode)/motion controller CPU (Q series)		●	●	–	–	–
	GT15-75ABUSL	Bus connection (1ch) unit thin model*1 for QnA/ACPU/motion controller CPU (A series)		●	●	–	–	–
	GT15-75ABUS2L	Bus connection (2ch) unit thin model*1 for QnA/ACPU/motion controller CPU (A series)		●	●	–	–	–
Serial communication unit	GT15-RS2-9P	RS-232 serial communication unit (D-sub 9-pin (male))		●	●	–	–	–
	GT15-RS4-9S	RS-422/485 serial communication unit (D-sub 9-pin (female))*2 *3		●	●	–	–	–
	GT15-RS4-TE	RS-422/485 serial communication unit (terminal block)*2 *Usable only when connecting to temperature controllers/indicating controllers via RS-485.		●	●	–	–	–
RS-422 conversion unit	GT15-RS2T4-9P	RS-232→RS-422 conversion unit	RS-422 connector: 9-pin	●	●*4	–	–	–
	GT15-RS2T4-25P		RS-422 connector: 25-pin	●	●*4	–	–	–
MELSECNET/H communication unit	GT15-J71LP23-25	Optical loop unit		●	●	–	–	–
	GT15-J71BR13	Coaxial bus unit		●	●	–	–	–
CC-Link IE controller network communication unit	GT15-J71GP23-SX	Optical loop unit		●	●	–	–	–
CC-Link communication unit	GT15-J61BT13	Intelligent device station unit (supporting CC-Link version 2)		●	●	–	–	–
Ethernet communication unit	GT15-J71E71-100	Ethernet (100Base-TX) unit		–	●	–	–	–

*1 : The unit cannot be used stacked on other units.
*2 : The unit may not be able to be used depending on the connection destination. See "List of connectable models" (page 86, 87).
*3 : The unit cannot be used when connecting to temperature controllers/indicating controllers via RS-485 (2-wire type).
*4 : The unit cannot be used with the GT155□.

Optional units

Product name	Model name	Specifications	Applicable model				
			GT16	GT15	GT11	Handy GOT	GT10
Printer unit	GT15-PRN	USB slave (PictBridge) for printer connection, 1ch *Cable for printer connection (3m) included	●	●	–	–	–
Multimedia unit	GT16M-MMR NEW	For video input (NTSC/PAL) 1ch motion image playback	●	–	–	–	–
Video input unit	GT16M-V4 NEW	For video input (NTSC/PAL) 4ch	●	–	–	–	–
	GT15V-75V4	For video input (NTSC/PAL) 4ch	–	●*5	–	–	–
RGB input unit	GT16M-R2 NEW	For analog RGB input 2ch	●	–	–	–	–
	GT15V-75R1	For analog RGB input 1ch	–	●*5	–	–	–
Video/RGB input unit	GT16M-V4R1 NEW	For video input (NTSC/PAL) 4ch / analog RGB 1ch composite input	●	–	–	–	–
	GT15V-75V4R1	For video input (NTSC/PAL) 4ch / analog RGB 1ch composite input	–	●*5	–	–	–
RGB output unit	GT16M-ROUT NEW	For analog RGB output 1ch	●	–	–	–	–
	GT15V-75ROUT	For analog RGB output	–	●*5	–	–	–
CF card unit	GT15-CFCD	For additional CF card port (B drive) on the back of the GOT	●	●	–	–	–
CF card extension unit	GT15-CFEX-C08SET	For additional CF card port (B drive) at the front of the control panel*6	●	●	–	–	–
Sound output unit	GT15-SOUT	For sound output	●	●	–	–	–
External input/output unit	GT15-DIOR NEW	For external input/output devices and operation panel connection (negative common input / source type output)	●	●	–	–	–
	GT15-DIO	For external input/output devices and operation panel connection (positive common input / sink type output)	●	●	–	–	–

*5 : Only GT1585V and GT1575V are applicable.
*6 : Includes unit to be installed on the control panel, unit to be installed on the GOT, and connection cable (0.8m).

Software

Product name	Model name	Included products				Remarks
		Screen design software GT Designer2 Ver.2	Simulation software GT Simulator2 Ver.2	Simple data conversion function GT Converter2 Ver.2	SoftGOT function*7 GT SoftGOT1000 Ver.2	
GT Designer2 Version2	SW2D5C-GTD2-E (Version upgrade)	●	–	●	●	English version
	SW2D5C-GTD2-EV (Version upgrade)	Version upgrade software (to upgrade GT Designer2 to the latest version)				English version
GT Works2 Version2	SW2D5C-GTWK2-E (Version upgrade)	●	●	●	●	English version
	SW2D5C-GTWK2-EV (Version upgrade)	Version upgrade software (to upgrade GT Works2 to the latest version)				English version
License key for GT SoftGOT1000*7	GT15-SGTKEY-U	For USB port				–
	GT15-SGTKEY-P	For parallel port				–

*7 : To use GT SoftGOT1000, a license key for GT SoftGOT1000 is necessary for each personal computer.

Options

Product name	Model name	Specifications		Applicable model				
				GT16	GT15	GT11	Handy GOT	GT10
Backlight	GT16-90XLTT NEW	Backlight	For GT1695M-XTB□	●	—	—	—	—
	GT16-80SLTT NEW		For GT1685M-STB□	●	—	—	—	—
	GT15-90XLTT		For GT1595-XTB□	—	●	—	—	—
	GT15-80SLTT		For GT1585V-STB□/GT1585-STB□	—	●	—	—	—
	GT15-70SLTT		For GT1575-STB□*1	—	●	—	—	—
	GT15-70VLTT		For GT1575V-STB□/GT1575-VTB□/GT1575-STB□*2	—	●	—	—	—
	GT15-70VLTN		For GT1575-VNB□/GT1572-VNB□	—	●	—	—	—
	GT15-60VLTT		For GT1565-VTB□	—	●	—	—	—
	GT15-60VLTN		For GT1562-VNB□	—	●	—	—	—
Optional function board	GT16-MESB NEW	Optional function board * The required optional function board varies depending on the GOT main unit and function. For the details, see "Notes for use" (page 30).	For MES interface function	●	—	—	—	—
	GT15-FNB		(No expansion memory)	—	●	—	—	—
	GT15-QFNB		(No expansion memory)	—	●	—	—	—
	GT15-QFNB16M		+ 16MB expansion memory	—	●	—	—	—
	GT15-QFNB32M		+ 32MB expansion memory	—	●	—	—	—
	GT15-QFNB48M		+ 48MB expansion memory	—	●	—	—	—
	GT15-MESB48M		+ 48MB expansion memory	—	●	—	—	—
	GT11-50FNB	Optional function board		—	—	●*3	●	—
GT10 memory loader	GT10-LDR	For GT1030/GT1020 (for OS project data transfer) no power source required		—	—	—	—	●*7
GT10 memory board	GT10-50FMB NEW	For GT105□ (for OS and project data transfer)		—	—	—	—	●*8
Protective sheet	GT16-90PSCB NEW	Protective sheet for 15" screen	Clear, 5 sheets	●	—	—	—	—
	GT16-90PSGB NEW		Antiglare, 5 sheets	●	—	—	—	—
	GT16-90PSCW NEW		Clear (frame: white), 5 sheets	●	—	—	—	—
	GT16-90PSGW NEW		Antiglare (frame: white), 5 sheets	●	—	—	—	—
	GT15-90PSCB		Clear, 5 sheets	—	●	—	—	—
	GT15-90PSGB		Antiglare, 5 sheets	—	●	—	—	—
	GT15-90PSCW		Clear (frame: white), 5 sheets	—	●	—	—	—
	GT15-90PSGW		Antiglare (frame: white), 5 sheets	—	●	—	—	—
	GT16-80PSCB NEW	Protective sheet for 12.1" screen	Clear, 5 sheets	●	—	—	—	—
	GT16-80PSGB NEW		Antiglare, 5 sheets	●	—	—	—	—
	GT16-80PSCW NEW		Clear (frame: white), 5 sheets	●	—	—	—	—
	GT16-80PSGW NEW		Antiglare (frame: white), 5 sheets	●	—	—	—	—
	GT15-80PSCB		Clear, 5 sheets	—	●	—	—	—
	GT15-80PSGB		Antiglare, 5 sheets	—	●	—	—	—
	GT15-80PSCW		Clear (frame: white), 5 sheets	—	●	—	—	—
	GT15-80PSGW		Antiglare (frame: white), 5 sheets	—	●	—	—	—
	GT15-70PSCB	Protective sheet for 10.4" screen	Clear, 5 sheets	—	●	—	—	—
	GT15-70PSGB		Antiglare, 5 sheets	—	●	—	—	—
	GT15-70PSCW		Clear (frame: white), 5 sheets	—	●	—	—	—
	GT15-70PSGW		Antiglare (frame: white), 5 sheets	—	●	—	—	—
	GT15-60PSCB	Protective sheet for 8.4" screen	Clear, 5 sheets	—	●	—	—	—
	GT15-60PSGB		Antiglare, 5 sheets	—	●	—	—	—
	GT15-60PSCW		Clear (frame: white), 5 sheets	—	●	—	—	—
	GT15-60PSGW		Antiglare (frame: white), 5 sheets	—	●	—	—	—
	GT15-50PSCB	Protective sheet for 5.7" screen (for GT15)	Clear, 5 sheets	—	●	—	—	—
	GT15-50PSGB		Antiglare, 5 sheets	—	●	—	—	—
	GT15-50PSCW		Clear (frame: white), 5 sheets	—	●	—	—	—
	GT15-50PSGW		Antiglare (frame: white), 5 sheets	—	●	—	—	—
	GT11-50PSCB	Protective sheet for 5.7" screen (for GT11)	Clear, 5 sheets	—	—	●	—	—
	GT11-50PSGB		Antiglare, 5 sheets	—	—	●	—	—
	GT11-50PSCW		Clear (frame: white), 5 sheets	—	—	●	—	—
	GT11-50PSGW		Antiglare (frame: white), 5 sheets	—	—	●	—	—
	GT11H-50PSC	Protective sheet for 5.7" screen (for Handy GOT)	Clear, 5 sheets	—	—	—	●	—
	GT10-50PSCB NEW	Protective sheet for 5.7" screen (for GT105□)	Clear, 5 sheets	—	—	—	—	●
	GT10-50PSGB NEW		Antiglare, 5 sheets	—	—	—	—	●
	GT10-50PSCW NEW		Clear (frame: white), 5 sheets	—	—	—	—	●
	GT10-50PSGW NEW		Antiglare (frame: white), 5 sheets	—	—	—	—	●
	GT10-30PSCB	Protective sheet for 4.5" screen (for GT1030)	Clear, 5 sheets	—	—	—	—	●
	GT10-30PSGB		Antiglare, 5 sheets	—	—	—	—	●
	GT10-30PSCW		Clear (frame: white), 5 sheets	—	—	—	—	●
	GT10-30PSGW		Antiglare (frame: white), 5 sheets	—	—	—	—	●
	GT10-20PSCB	Protective sheet for 3.7" screen (for GT1020)	Clear, 5 sheets	—	—	—	—	●
	GT10-20PSGB		Antiglare, 5 sheets	—	—	—	—	●
	GT10-20PSCW		Clear (frame: white), 5 sheets	—	—	—	—	●
	GT10-20PSGW		Antiglare (frame: white), 5 sheets	—	—	—	—	●
USB protective cover	GT16-UCOV NEW	Protective cover for USB interface on main unit front panel (for replacement)	For 15"/12.1"	●	—	—	—	—
	GT15-UCOV		For 15"/12.1"/10.4"/8.4"	—	●	—	—	—
	GT11-50UCOV		For 5.7"	—	●	●	—	—
Oil resistant cover*5	GT05-90PCO	Oil resistant cover for 15" screen		●	●	—	—	—
	GT05-80PCO	Oil resistant cover for 12.1" screen		●	●	—	—	—
	GT05-70PCO	Oil resistant cover for 10.4" screen		—	●	—	—	—
	GT05-60PCO	Oil resistant cover for 8.4" screen		—	●	—	—	—
	GT05-50PCO	Oil resistant cover for 5.7" screen		—	●	●	—	●*8
Emergency stop switch guard	GT11H-50ESCOV	For accidental operation prevention of emergency stop switch		—	—	—	●	—
Stand	GT15-90STAND	Stand for 15" type		●	●	—	—	—
	GT15-80STAND	Stand for 12.1" type		●	●	—	—	—
	GT15-70STAND	Stand for 8.4"/10.4" type		—	●	—	—	—
	GT05-50STAND	Stand for 5.7" type		—	●	●	—	●*8
CF card	GT05-MEM-32MC	32MB flash ROM		●	●	●	●	—
	GT05-MEM-64MC	64MB flash ROM		●	●	●	●	—
	GT05-MEM-128MC	128MB flash ROM		●	●	●	●	—
	GT05-MEM-256MC	256MB flash ROM		●	●	●	●	—
	GT05-MEM-512MC coming soon	512MB flash ROM		●	●	●	●	—
	GT05-MEM-1GC coming soon	1GB flash ROM		●	●	●	●	—
	GT05-MEM-2GC coming soon	2GB flash ROM		●	●	●	●	—
Memory card adapter	GT05-MEM-ADPC	CF card→memory card (TYPE Ⅱ) conversion adapter		●	●	●	●	—

Options

Product name	Model name	Specifications			Applicable model				
					GT16	GT15	GT11	Handy GOT	GT10
Attachment	GT15-70ATT-98	Attachment for 10.4" type	A985GOT *6	→GT157□	–	●	–	–	–
	GT15-70ATT-87		A870GOT-SWS A870GOT-TWS A870GOT-TW	A8GT-70GOT-TB A8GT-70GOT-SW A8GT-70GOT-SB		●	–	–	–
	GT15-60ATT-97	Attachment for 8.4" type	A97□GOT	→GT156□	–	●	–	–	–
	GT15-60ATT-96		A960GOT			●	–	–	–
	GT15-60ATT-87		A870GOT-EWS A870GOT-EW A870GOT-EB	A77GOT-EL-S5 A77GOT-EL-S3 A77GOT-EL		●	–	–	–
	GT15-60ATT-77		A77GOT-CL-S5 A77GOT-CL-S3 A77GOT-CL	A77GOT-L-S5 A77GOT-L-S3 A77GOT-L		●	–	–	–
	GT15-50ATT-95W	Attachment for 5.7" type	A956WGOT	→GT155□ →GT115□	–	●	●	–	–
	GT15-50ATT-85		A85□GOT			●	●	–	–
Battery	GT15-BAT	Battery for backup of clock data and maintenance time notification data			●	●	–	–	–
	GT11-50BAT	Battery for backup of clock data, alarm history and recipe data (for replacement)			–	–	●	●	●*4

*1: Function version B or earlier
*2: Function version C or later
*3: Excluding GT115□-Q□BDQ and GT115□-Q□BDA
*4: For GT105□/GT1030 only
*5: Check if the oil resistant cover can be used in the actual environment before use.
When using the oil resistant cover, the front USB interface and human sensor cannot be used.
*6: Including the GP250□ and GP260□ manufactured by Pro-face.
*7: For GT1030/GT1020 only
*8: For GT105□ only

Manuals

Manual title	Contents	Catalog No.
GT Designer2 Version2 Basic Operation/Data Transfer Manual <for GOT1000 Series>	Basic software installation, basic screen design techniques, and data transfer to a terminal	SH-080529ENG
GT Designer2 Version2 Screen Design Manual <for GOT1000 Series>	Programming manual, including instruction for objects, specifications	SH-080530ENG
GOT1000 Series Connection Manual	System configurations and procedure to create customized cables	SH-080532ENG
GOT1000 Series Extended Function/Optional Function Manual	Information on extended functions and optional functions available to the GOT	SH-080544ENG
GOT1000 Series Gateway Function Manual	Specifications, system configurations and setting procedures for the Gateway function	SH-080545ENG
GOT1000 Series MES Interface Function Manual	Specifications, system configurations and setting procedures for the MES interface function	SH-080654ENG
GT16 User's Manual	GT16 general specification overview, parts and settings, external dimensions, mounting, wiring, optional interfaces	SH-080778ENG
GT15 User's Manual	GT15 general specification overview, parts and settings, external dimensions, mounting, wiring, optional interfaces	SH-080528ENG
GT11 User's Manual	GT11 general specification overview, parts and settings, external dimensions, mounting, wiring, optional interfaces	JY997D17501
Handy GOT User's Manual	Handy GOT general specification overview, parts and settings, external dimensions, wiring, optional interfaces, in addition to explanations of utility, system configurations, and cable fabrication	JY997D20101
GT10 User's Manual	GT10 general specification overview, parts and settings, external dimensions, mounting, wiring, optional interfaces	JY997D24701
GT SoftGOT1000 Version2 Operation Manual	GT SoftGOT1000 screen configuration, functions and operating procedures	SH-080602ENG
GT Simulator2 Version2 Operation Manual	GT Simulator2 specifications and operating instructions	SH-080546ENG
GT Converter2 Version2 Operation Manual	GT Converter2 operating instructions	SH-080533ENG

Cables

Product name		Model name	Cable length	Third party products *1	Application	Applicable model *2				
						GT16	GT15	GT11	Handy GOT	GT10
Bus connection cable for QCPU (Q mode)	QCPU extension cable GOT-to-GOT connection cable	GT15-QC06B	0.6m	○	For connection between QCPU and GOT For connection between GOT and GOT	●	●	●	—	—
		GT15-QC12B	1.2m							
		GT15-QC30B	3m							
		GT15-QC50B	5m							
		GT15-QC100B	10m							
	Long-distance connection cable for QCPU GOT-to-GOT long-distance connection cable	GT15-QC150BS	15m	○	For long-distance (13.2m or more) connection between QCPU and GOT (A9GT-QCNB required) For long-distance connection between GOT and GOT	●	●	●	—	—
		GT15-QC200BS	20m							
		GT15-QC250BS	25m							
		GT15-QC300BS	30m							
		GT15-QC350BS	35m							
Bus extension connector box		A9GT-QCNB	—	—	Used for QCPU long-distance (13.2m or more) bus connection	●	●	●	—	—
Bus connection cable for QnA/ACPU/motion controller CPU (A series)	Large CPU extension cable	GT15-C12NB	1.2m	○	For connection between QnA/ACPU/motion controller CPU (A series, extension base) and GOT	●	●	●	—	—
		GT15-C30NB	3m							
		GT15-C50NB	5m							
		GT15-AC06B	0.6m	○	For connection between QnA/ACPU/motion controller CPU (A series, extension base) and A7GT-CNB	●	●	●	—	—
		GT15-AC12B	1.2m							
		GT15-AC30B	3m							
		GT15-AC50B	5m							
		GT15-A370C12B-S1	1.2m	○	For connection between motion controller CPU (A series, main base) and GOT	●	●	●	—	—
		GT15-A370C25B-S1	2.5m							
		GT15-A370C12B	1.2m	○	For connection between motion controller CPU (A series, main base) and A7GT-CNB	●	●	●	—	—
		GT15-A370C25B	2.5m							
	Small CPU extension cable	GT15-A1SC07B	0.7m	○	For connection between QnAS/AnSCPU/motion controller CPU (A series) and GOT	●	●	●	—	—
		GT15-A1SC12B	1.2m							
		GT15-A1SC30B	3m							
		GT15-A1SC50B	5m	○	For connection between QnAS/AnSCPU and GOT	●	●	●	—	—
	Small CPU extension cable	GT15-A1SC05NB	0.45m	○	For connection between QnAS/AnSCPU/motion controller CPU (A series) and A7GT-CNB	●	●	●	—	—
		GT15-A1SC07NB	0.7m							
		GT15-A1SC30NB	3m							
		GT15-A1SC50NB	5m	○	For connection between QnAS/AnSCPU and A7GT-CNB	●	●	●	—	—
	Small CPU long-distance connection cable	GT15-C100EXSS-1	10.6m	○	For long-distance connection between QnAS/AnSCPU/motion controller CPU (A series) and GOT For long-distance connection between A7GT-CNB and GOT *Set of GT15-EXCNB and GT15-C□BS	●	●	●	—	—
		GT15-C200EXSS-1	20.6m							
		GT15-C300EXSS-1	30.6m							
	GOT-to-GOT connection cable	GT15-C07BS	0.7m	○	For connection between GOT and GOT	●	●	●	—	—
		GT15-C12BS	1.2m							
		GT15-C30BS	3m							
		GT15-C50BS	5m							
	GOT-to-GOT long-distance connection cable	GT15-C100BS	10m	○	For connection between GOT and GOT	●	●	●	—	—
		GT15-C200BS	20m							
		GT15-C300BS	30m							
	A0J2HCPU connection cable	GT15-J2C10B	1m	○	For connection between power supply unit (A0J2-PW) for A0J2HCPU and GOT	●	●	●	—	—
Bus connector conversion box		A7GT-CNB	—	—	Used for QnA/ACPU long-distance bus connection	●	●	●	—	—
Buffer circuit cable		GT15-EXCNB	0.5m	○	Usable as GT15-C□EXSS-1 in combination with GT15-C□BS	●	●	●	—	—
Ferrite core set for Q bus cable (two-pack)		GT15-QFC	—	○	Ferrite cores for replacing existing GOT-A900 bus cable with bus cable for GOT1000	●	●	●	—	—
Ferrite core set for A bus cable (two-pack)		GT15-AFC	—							
RS-422 conversion cable NEW		GT16-C02R4-9S	0.2m	○	For connection between RS-422/485 (connector) and RS-422 cable (D-sub 9 pins)	●	—	—	—	—
RS-485 terminal block conversion unit NEW		FA-LTBGTR4CBL05	0.5m	○	For connection between RS-422/485 (connector) and terminal block conversion cable	●	—	—	—	—
		FA-LTBGTR4CBL10	1m							
		FA-LTBGTR4CBL20	2m							
RS-422 cable	QnA/A/FXCPU direct connection cable Computer link connection cable	GT01-C30R4-25P	3m	—	For connection between QnA/ACPU/motion controller CPU (A series)/FXCPU (D-sub 25-pin connector) and GOT For connection between FA-CNV□CBL and GOT For connection between serial communication unit and GOT For connection between AJ65BT-G4-S3 and GOT	●	●	●	*3	●*4
		GT01-C100R4-25P	10m							
		GT01-C200R4-25P	20m						—	
		GT01-C300R4-25P	30m							
		GT10-C30R4-25P	3m	—	For connection between QnA/A/FXCPU (D-sub 25-pin connector) and GOT For connection between serial communication unit (AJ71QC24(N)-R4) and GOT	—	—	—	—	●*5
		GT10-C100R4-25P	10m							
		GT10-C200R4-25P	20m							
		GT10-C300R4-25P	30m							
	Computer link connection cable	GT09-C30R4-6C	3m	○	For connection between serial communication unit and GOT For connection between computer link unit and GOT	●	●	●	—	●*4
		GT09-C100R4-6C	10m							
		GT09-C200R4-6C	20m							
		GT09-C300R4-6C	30m							
	FXCPU direct connection cable FX communication function extension board connection cable	GT01-C10R4-8P	1m	—	For connection between FXCPU (MINI-DIN 8-pin connector) and GOT For connection between FXCPU communication function extension board and GOT	●	●	●	—	●*4
		GT01-C30R4-8P	3m							
		GT01-C100R4-8P	10m							
		GT01-C200R4-8P	20m							
		GT01-C300R4-8P	30m							
		GT10-C10R4-8P	1m			—	—	—	—	●*5
		GT10-C30R4-8P	3m							
		GT10-C100R4-8P	10m							
		GT10-C200R4-8P	20m							
		GT10-C300R4-8P	30m							
		GT10-C10R4-8PL	1m	—	For connection between FXCPU (MINI-DIN 8-pin connector) and GOT For connection between FXCPU communication function extension board and GOT *The unit cannot be used with the FX1NC, FX2NC, FX3UC-D/DSS, FX3G.					
RS-232 cable	QCPU direct connection cable Data transfer cable	GT01-C30R2-6P	3m	—	For connection between QCPU and GOT/personal computer (GT SoftGOT1000) (D-sub 9-pin)	●	●	●	—	●*4
					For connection between personal computer (screen design software) (D-sub 9-pin, female) and GOT (MINI-DIN 6-pin, male)	—	—	—	●	●*5
		GT10-C30R2-6P	3m	—	For connector conversion box between QCPU and Handy GOT	—	—	—	—	●*5
		GT11H-C30R2-6P	3m	—	For connection between QCPU and GOT and between GOTs.	—	—	—	●	—
	FX communication function extension board connection cable, FX communication function adapter connection cable, Data transfer cable	GT01-C30R2-9S	3m	—	For connection between FXCPU communication function extension board (D-sub 9-pin connector) and GOT/personal computer (GT SoftGOT1000) (D-sub 9-pin) For connection between FXCPU communication function adapter (D-sub 9-pin connector) and GOT For connection between personal computer (screen design software) (D-sub 9-pin, female) and GOT (D-sub 9-pin, female)	●	●	●	—	●*4

Cables

Product name		Model name	Cable length	Third party products *1	Application	Applicable model *2				
						GT16	GT15	GT11	Handy GOT	GT10
RS-232 cable	FX communication function adapter connection cable	GT01-C30R2-25P	3m	—	For connection between FXCPU communication special adapter (D-sub 25-pin connector) and GOT, personal computer (GT SoftGOT1000) (D-sub 9-pin)	●	●	●	—	● *4
	Computer link connection cable	GT09-C30R2-9P	3m	○	For connection between serial communication unit and GOT For connection between computer link unit and GOT For connection between AJ65BT-R2N and GOT (GT09-C30R2-9P only)	●	●	●	—	● *4
		GT09-C30R2-25P	3m							
Connector conversion box for Handy GOT		GT11H-CNB-37S	—	—	Converts D-sub 37-pin connector to terminal block and D-sub 9-pin connector	—	—	—	●	—
External connection cable	FA device, power supply and operation switch connection cable	GT11H-C30-37P	3m	—	For connection between FA device connection relay cable and GOT	—	—	—	●	—
		GT11H-C60-37P	6m							
		GT11H-C100-37P	10m							
		GT11H-C30	3m	—	For connection between FA device, power supply and operation switches and GOT	—	—	—	●	—
		GT11H-C60	6m							
		GT11H-C100	10m							
FA device connection relay cable	RS-422, power supply and operation switch connection cable	GT11H-C15R4-8P	1.5m	—	For connection between FXCPU and GOT For connection between power supply and operation switches and GOT	—	—	—	●	—
		GT11H-C15R4-25P	1.5m	—	For connection between A/QnACPU and GOT For connection between power supply and operation switches and GOT	—	—	—	●	—
	RS-232, power supply and operation switch connection cable	GT11H-C15R2-6P	1.5m	—	For connection between QCPU and GOT For connection between power supply and operation switches and GOT	—	—	—	●	—
Barcode reader connection cable		GT10-C20H-6PT9P	0.3m	—	For connection between barcode reader (D-sub 9-pin, female) and GOT (MINI-DIN 6-pin, female) RS-232	—	—	—	—	● *5
External I/O unit connection conversion cable		GT15-C03HTB	0.3m	○	For connection between GOT1000 (external I/O unit) and GOT-A900 external I/O interface unit connection cable (A8GT-C05TK/A8GT-C30TB/user-fabricated cable)	●	●	—	—	—
Analog RGB cable NEW		GT15-C50VG	5m	○	For connection between external monitor, personal computer and vision sensor and GOT	●	●	—	—	—
USB cable	RS-232/USB conversion adapter for data transfer	GT10-RS2TUSB-5S	—	—	For connection between personal computer (USB) and GOT (RS-232) (Adapter and personal computer are connected with GT09-C30USB-5P.)	—	—	—	—	● *5
	Data transfer cable	GT09-C30USB-5P	3m	○	For connection between personal computer (USB) and GOT (USB mini-B) For connection between QnUCPU (USB mini-B) and personal computer (GT SoftGOT1000)	●	●	●	●	● *4
					For connection between printer and GOT (printer unit)	●	●	—	—	—

*1 : FA-LTBGTR4CBL□ is developed by Mitsubishi Electric Engineering Company Limited and sold through your local sales office.
The other products listed are developed by Mitsubishi Electric System & Service Co., LTD. and sold through your local sales office.
*2 : The applicable connection configuration and cable vary depending on the GOT main unit. For more details, see the GOT1000 Series Handbook and the GOT1000 Series Connection Manual.
*3 : Can be used when used together with the Handy GOT connector conversion box.
*4 : Can be used only for GT105□.
*5 : Can be used only for GT1030 and GT1020.

Cables for third party FA devices

Product name		Model name	Cable length	Third party products *1	GOT connection destination	Applicable model *2				
						GT16	GT15	GT11	Handy GOT	GT10
RS-232 cable	Cable for OMRON PLC	GT09-C30R20101-9P	3m	○	PLC CPU: CQM1/CQM1H/CS1/CJ1/CV500/CV1000/CV2000/CVM1 Serial communication unit: CS1W-SCU21/CJ1W-SCU41 Communication board: C200HW-COM02/COM05/COM06 Serial communication board: CQM1-SCB41/CS1W-SCB41/CS1W-SCB21	●	●	●	*3	—
		GT09-C30R20102-25S	3m		Connection cable: CQM1-CIF01					● *4
		GT09-C30R20103-25P	3m		Base mount type host link unit: C500-LK201-V1					
	Cable for KEYENCE PLC	GT09-C30R21101-6P	3m		PLC CPU: KV-700/1000					
		GT09-C30R21102-9S	3m		Multi-communication unit: KV-L20/L20R port 1					
		GT09-C30R21103-3T	3m		Multi-communication unit: KV-L20/L20R port 2					
	Cable for SHARP PLC	GT09-C30R20601-15P	3m		PLC CPU: JW-22CU/70CUH/100CUH/100CU					—
		GT09-C30R20602-15P	3m		PLC CPU: JW-32CUH/33CUH					
	Cables for JTEKT PLC	GT09-C30R21201-25P	3m		RS-232/RS-422 converter: TXU-2051					
	Cable for Shinko Technos digital indicating controller	GT09-C30R21401-4T	3m		Digital indicating controller: FCR-100/FCD-100/FCR-23A/PC-900/FIR series					
	Cable for TOSHIBA PLC	GT09-C30R20501-9P	3m		PLC CPU: T2E					
		GT09-C30R20502-15P	3m		PLC CPU: T2N					
	Cable for Hitachi Industrial Equipment Systems PLC	GT09-C30R20401-15P	3m		PLC CPU: H-4010/H series board type/EH-150 series Intelligent serial port module: COMM-H/COMM-2H					
		GT09-C30R20402-15P	3m		PLC CPU: H-4010/EH-150 series					
	Cable for Hitachi PLC	GT09-C30R21301-9S	3m		Communication module: LQE560/LQE060/LQE160					
	Cable for Fuji Electric FA Components & Systems PLC	GT09-C30R21003-25P	3m		RS-232C interface card: NV1L-RS2 RS-232C/485 interface capsule: FFK120A-C10 General interface module: NC1L-RS2/FFU120B					
	Cable for Matsushita Electric Works PLC	GT09-C30R20901-25P	3m		RS-422⇔232 conversion adapter: AFP8550					● *4
		GT09-C30R20902-9P	3m		PLC CPU: FP2/FP2SH/FP10(S)/FP10SH/FP-M Computer communication unit: AFP2462/AFP3462/AFP5462					
		GT09-C30R20903-9P	3m		PLC CPU: FP1-C24C/C40C					
		GT09-C30R20904-3C	3m		PLC CPU: FP1-C16CT/C32CT					
	Cable for YASKAWA Electric PLC	GT09-C30R20201-9P	3m		PLC CPU: PROGIC-8/MP-920/MP-930					
		GT09-C30R20202-15P	3m		PLC CPU: PROGIC-8					
		GT09-C30R20203-9P	3m		PLC CPU: CP-9300MS MEMOBUS module: CP-217IF (when connected to CN1)					
		GT09-C30R20204-14P	3m		PLC CPU: MP940					
		GT09-C30R20205-25P	3m		MEMOBUS module: CP-217IF (when connected to CN2) Yokogawa Electric personal computer module: LC01-0N/LC02-0N					
	Cable for Yokogawa Electric PLC	GT09-C30R20301-9P	3m		CPU port/D-sub 9-pin conversion cable: KM10-0C					—
		GT09-C30R20302-9P	3m		Personal computer module: F3LC11-1N/F3LC11-1F/F3LC12-1F/F3LC11-2N					
		GT09-C30R20305-9S	3m		PLC CPU: NFCP1000/NFJT100					
	Cable for Yokogawa Electric temperature controller	GT09-C30R20304-9S	3m		Converter: ML2-□					
	Cable for Allen-Bradley (Rockwell Automation, Inc.) PLC	GT09-C30R20701-9S	3m		PLC CPU: SL500 series Converter: 1761-NET-AIC					● *4
	Cable for Siemens AG PLC	GT09-C30R20801-9S	3m		HMI adapter					

*1 : Items listed above are developed by Mitsubishi Electric System & Service Co., LTD., and sold through your local sales office.
*2 : The applicable connection configuration and cable vary depending on the GOT main unit. For more details, see the GOT1000 Series Handbook and the GOT1000 Series Connection Manual.
*3 : The RS-422 cables less than 10m and the RS-232 cable less than 3m can be used when the connector conversion box for the Handy GOT is used.
*4 : Can be used only for GT105□.

Cables for third party FA devices

Product name			Model name	Cable length	Third party products *1	GOT connection destination	Applicable model *2				
							GT16	GT15	GT11	Handy GOT	GT10
RS-422 cable	Cable for OMRON PLC		GT09-C30R40101-9P	3m	○	PLC CPU: CV500/CV1000/CV2000/CVM1 Serial communication unit: CJ1W-SCU41 Serial communication board: CQM1-SCB41/CS1W-SCB41	●	●	●	*3	– ● *4
			GT09-C100R40101-9P	10m							
			GT09-C200R40101-9P	20m							
			GT09-C300R40101-9P	30m							
			GT09-C30R40102-9P	3m		Base mount type host link unit: C200H-LK202-V1/C500H-LK201-V1 Communication board: C200HW-COM03/COM06					
			GT09-C100R40102-9P	10m							
			GT09-C200R40102-9P	20m							
			GT09-C300R40102-9P	30m							
			GT09-C30R40103-5T	3m		Communication board: CP1W-CIF11					
			GT09-C100R40103-5T	10m							
			GT09-C200R40103-5T	20m							
			GT09-C300R40103-5T	30m							
	Cable for KEYENCE PLC		GT09-C30R41101-5T	3m		Multi-communication unit: KV-L20/L20R port 2					
			GT09-C100R41101-5T	10m							
			GT09-C200R41101-5T	20m							
			GT09-C300R41101-5T	30m							
	Cable for SHARP PLC		GT09-C30R40601-15P	3m		PLC CPU: JW-22CU/70CUH/100CUH/100CU					–
			GT09-C100R40601-15P	10m							
			GT09-C200R40601-15P	20m							
			GT09-C300R40601-15P	30m							
			GT09-C30R40602-15P	3m		PLC CPU: JW-32CUH/33CUH					
			GT09-C100R40602-15P	10m							
			GT09-C200R40602-15P	20m							
			GT09-C300R40602-15P	30m							
			GT09-C30R40603-6T	3m		Link unit: JW-21CM/10CM/ZW-10CM					
			GT09-C100R40603-6T	10m							
			GT09-C200R40603-6T	20m							
			GT09-C300R40603-6T	30m							
	Cable for JTEKT PLC		GT09-C30R41201-6C	3m		PLC CPU: PC3J/PC3JL Communication module: PC/CMP2-LINK					
			GT09-C100R41201-6C	10m							
			GT09-C200R41201-6C	20m							
			GT09-C300R41201-6C	30m							
	Cable for TOSHIBA PLC		GT09-C30R40501-15P	3m		PLC CPU: T2/T3/T3H/model3000(S3)					
			GT09-C100R40501-15P	10m							
			GT09-C200R40501-15P	20m							
			GT09-C300R40501-15P	30m							
			GT09-C30R40502-6C	3m		PLC CPU: T2E/model2000(S2)					
			GT09-C100R40502-6C	10m							
			GT09-C200R40502-6C	20m							
			GT09-C300R40502-6C	30m							
			GT09-C30R40503-15P	3m		PLC CPU: T2N					
			GT09-C100R40503-15P	10m							
			GT09-C200R40503-15P	20m							
			GT09-C300R40503-15P	30m							
	Cable for Hitachi Industrial Equipment Systems PLC		GT09-C30R40401-7T	3m		Intelligent serial port module: COMM-H/COMM-2H					
			GT09-C100R40401-7T	10m							
			GT09-C200R40401-7T	20m							
			GT09-C300R40401-7T	30m							
	Cable for Hitachi PLC		GT09-C30R41301-9S	3m		PLC CPU: LQP510 Communication module: LQE565/LQE165					
			GT09-C100R41301-9S	10m							
			GT09-C200R41301-9S	20m							
			GT09-C300R41301-9S	30m							
	Cable for Fuji Electric FA Components & Systems PLC		GT09-C30R41001-6T	3m		RS-232C/485 interface capsule: FFK120A-C10 General interface module: NC1L-RS4/FFU120B					
			GT09-C100R41001-6T	10m							
			GT09-C200R41001-6T	20m							
			GT09-C300R41001-6T	30m							
	Cable for Yaskawa Electric PLC		GT09-C30R40201-9P	3m		MEMOBUS module: JAMSC-120NOM27100/JAMSC-IF612					–
			GT09-C100R40201-9P	10m							
			GT09-C200R40201-9P	20m							
			GT09-C300R40201-9P	30m							
			GT09-C30R40202-14P	3m		PLC CPU: MP940					● *4
			GT09-C100R40202-14P	10m							
			GT09-C200R40202-14P	20m							
			GT09-C300R40202-14P	30m							
	Cable for Yokogawa Electric	PLC	GT09-C30R40301-6T	3m		Personal computer link module: F3LC11-2N					
			GT09-C100R40301-6T	10m							
			GT09-C200R40301-6T	20m							
			GT09-C300R40301-6T	30m							
			GT09-C30R40302-6T	3m		Personal computer link module: LC02-0N					
			GT09-C100R40302-6T	10m							
			GT09-C200R40302-6T	20m							
			GT09-C300R40302-6T	30m							
		Temperature controller	GT09-C30R40303-6T	3m		Temperature controller: GREEN series					
			GT09-C100R40303-6T	10m							
			GT09-C200R40303-6T	20m							
			GT09-C300R40303-6T	30m							
			GT09-C30R40304-6T	3m		Temperature controller: UT2000 series					
			GT09-C100R40304-6T	10m							
			GT09-C200R40304-6T	20m							
			GT09-C300R40304-6T	30m							

*1 : Items listed above are developed by Mitsubishi Electric System & Service Co., LTD., and sold through your local sales office.
*2 : The applicable connection configuration and cable vary depending on the GOT main unit. For more details, see the GOT1000 Series Handbook and the GOT1000 Series Connection Manual.
*3 : The RS-422 cables less than 10m and the RS-232 cable less than 3m can be used when the connector conversion box for the Handy GOT is used.
*4 : Can be used only for GT105□.

7. GLOSSARY

This chapter describes glossaries related to the GOT.

7. GLOSSARY

Item	Description
CC-Link connection	Connection to the CC-Link network system CC-Link (Control & Communication Link) is a high-performance FA field network. With CC-Link, a large quantity of ON/OFF information as bit data and numerical information as word data can be sent at 10Mbps of the highest communication speed in the industry.
CC-Link IE controller network connection	Connection to the CC-Link IE controller network system CC-Link IE controller network is a network that realizes a communication speed at 1 Gbps and a maximum 256 Kbyte of the network shared memory.
CF card	Abbreviation for CompactFlash Card CompactFlash is the memory card standard suggested by SanDisk Corporation. A CF card consists of the flash memory that data are not deleted without energization and the control circuit for the external I/O.
Direct CPU connection	The GOT can communicate with a programmable controller and each module with connecting the GOT to the interface of the programmable controller CPU module.
Document Converter	Software for GOT1000 series Software for creating data for the document display function of GT Designer2
Ethernet connection	Connection with the standard network communication method (Ethernet) with personal computers and workstations
GOT internal devices	Devices used in the GOT The GOT internal devices include word devices for numerical information and bit devices for ON/OFF information.
GT Converter2	Software for converting the project data created with the GOT800 series drawing software and with the screen editor software manufactured by Digital Electronics Corporation into data applicable to GT Designer2
GT Designer2	Software for creating the screen for GOT1000 series and GOT900 series
GT Simulator2	Software for simulating operations of the GOT-A900 series and GOT1000 series on a personal computer with connecting the GOT to GX Simulator and a programmable controller CPU
GT SoftGOT1000	Software for using a personal computer as the GOT1000 series
GT SoftGOT2	Software for using a personal computer as the GOT-A900 series
MELSECNET/10 connection	Connection to one of the MELSEC (name for the networks of Mitsubishi Electric Corporation) network systems The high-speed communication of 10 Mbps is available.
MELSECNET/H connection	Connection to the control network system (MELSECNET/H) among manufacturing equipment Data directly related to operations of mechanical equipment can be communicated among control equipment in real time with the high-speed communication and large-capacity link devices.
MES DB Connection Service	MES is an abbreviation for Manufacturing Execution Systems. The system controls and monitors the status of factories in real time for optimizing production activities. DB Connection Service is software. The MES interface function for the GOT can be used with installing the software on the server computer.
Programmable controller to programmable controller network	System for the data communication In the MELSECNET/10 network system, multiple programmable controllers can be connected for the data communication.
STN	STN is an abbreviation for Super Twisted Nematic. The 256-color, monochrome with 16 shades of gray (white/black), and monochrome (white/black) displays are available for GOT1000 series.
TFT	TFT is an abbreviation for Thin Film Transistor. The 256-color and 65536-color displays are available for GOT1000 series.
USB memory	Memory that is available when it is connected to the USB interface.
Intelligent device station	One of the CC-Link system stations The cyclic transmission and transient transmission are available. The GOT connected to CC-Link corresponds to an intelligent device station.

(Continued to next page)

Item	Description
Window screen	Screen displayed on the base screen A created window screen is displayed as an overlap window, a superimpose window, a key window, or a dialog window.
Overlap window	Window that pops up on the base screen The window can be manually moved or closed. Up to two windows can be simultaneously displayed.
Object	For GOT1000 series, the GOT functions are enabled with setting figures, including switches, lamps, and display panes for the numeric display, and with assigning devices (bit and word) and operation functions to the figures on GT Designer2. Object is a generic term for the targets to be set.
Option OS	OS to be installed on the GOT for using the option functions For using the option functions, an option function board is separately required.
Option units	Extension units to be installed on the extension unit interfaces of the GOT excluding the communication units
Extended function OS	OS to be installed on the GOT for using the extended functions
Extension unit	Generic term for the option units and communication units
Screen switching	Function for switching between base screens and window screens of the GOT The screen switching is enabled with screen switching devices (word devices).
Control station	One of the MELSECNET/10 (programmable controller to programmable controller network) stations The control station controls the whole network. Only one control station is required in a network.
Key window	Window that pops up on the base screen for input operations, including the numerical input The key window is divided into two types. One is preinstalled in the GOT, and the other is created by the user.
Standard monitor OS	OS to be installed on the GOT for starting the GOT
Graphic Operation Terminal	Term for MITSUBISHI human machine interface Graphic Operation Terminal is abbreviated to GOT.
Computer link connection	The GOT can communicate with a programmable controller and each module via a computer link module connected to a programmable controller.
Comment	Character string registered by the user on GT Designer2 Comments can be displayed with the multiple object functions when the comments are registered as the basic comment or the comment group in advance.
Context menu	Menu displaying a list of shortcuts A list of shortcuts that are available for the item currently selected is displayed. When using GT Designer2, right-click the editor screen to display it.
System monitor	Function of the GOT that devices of a programmable controller CPU and the buffer memory of an intelligent function module can be monitored or tested
Serial communication module	Module that reads from or writes to programmable controller devices or that realizes the function with connecting a programmable controller and computer (GOT or personal computer) using RS-232 or RS-422 lines for serial communication
Serial communication	Communication method where data is sent or received one bit by one with a signal line
Superimpose window	Window superimposed on the base screen When a superimpose window is switched, a part of the base screen can be changed. Up to two windows can be simultaneously displayed.
Extension cable	Cable for connecting the extension base unit (main base unit) and the GOT for the bus connection between programmable controller and the GOT
Dialog window	Window displayed on the top of all screens The window can be used to indicate an error and warning for the system. The window can also be used instead of system messages displayed on the GOT.
Communication driver	OS to be installed on the GOT for communicating with controllers, including a programmable controller CPU The communication driver dedicated to each connection type (bus connection, direct CPU connection, and others) is required.

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Item	Description
Communication unit	Extension unit to be installed on the extension interfaces of the GOT for communicating with controllers, including a programmable controller CPU
Device	Generic term for the memories equipped in the programmable controller CPU The device is for storing data or ON/OFF signal used for sequence programs.
Coaxial cable	One of the electrical cables The cable is covered with an insulator and the covered cable is shielded for effectively transmitting high-frequency signals.
Coaxial bus system	Network configuration using the MELSECNET/10 coaxial cable connection The system is called "Coaxial bus system" since the bus type connection is used.
Bus connection	A bus is a transmission path that enables a programmable controller CPU to communicate with the other modules. The bus connection is that the GOT is connected to the bus.
Fiber-optic cable	Cable for transmitting optical signals The programmable controller is activated by an electrical signal. The electrical signal of ON/OFF is converted to the optical signal to send the optical signal via a fiber-optic cable. When receiving the signal, the signal is converted to the electrical signal.
Optical loop system	Network configuration using the MELSECNET/10 fiber-optic cable connection The system is called "Optical loop system" since the loop (ring) type connection is used.
Bit device	One of the devices of the programmable controller The device that transmits information by one bit
Parts	Figures registered as parts Parts are used for the parts display and parts movement. Figures that can be registered as parts include character and image data.
Flash memory	Memory that stored data are not deleted without energization
Project (file)	A group of all the information to be displayed on a GOT A project consists of the screen information, parts information, and others. The information (project) is created as one file.
Base screen	The basic screen for the GOT screen display
Base unit	Module where a programmable controller CPU module, power supply module, I/O module, or intelligent function module is installed
Master station	A programmable controller CPU station where a master module controlling the CC-Link system and data link is installed
Memory card	Screen data can be stored in a memory card with a GOT, and the data can be used with the other GOTs. The memory card includes the CF card.
Motion controller CPU	A CPU module that enables the positioning control of multiple axes easier and with high-speed and high-accuracy The processing load is distributed by assigning the complicated servo control to the motion CPU module and other machine and information controls to the programmable controller CPU module.
List editor	Function for changing a sequence program in the list program format (instruction word) with the GOT Programs can be edited on the scene immediately.
Remote I/O station	One of the remote I/O network system stations The remote I/O station is a station at the remote side that sends and receives signals with controllers at the machine side by the command from the master station in a remote place.
Report screen	Screen for creating formats to be output with the report function
Local station	One of the CC-Link system stations The local station is a programmable controller CPU station with a local module is installed.
Word device	One of the devices of the programmable controller The device that transmits information by 16 bits (word). The GOT can treat the word device with 16 bits or 32 bits.

WARRANTY

Please confirm the following product warranty details before using this product.

Gratis Warranty Term and Gratis Warranty Range

If any faults or defects (hereinafter "Failure") found to be the responsibility of Mitsubishi occurs during use of the product within the gratis warranty term, the product shall be repaired at no cost via the sales representative or Mitsubishi Service Company.
However, if repairs are required onsite at domestic or overseas location, expenses to send an engineer will be solely at the customer's discretion. Mitsubishi shall not be held responsible for any re-commissioning, maintenance, or testing on-site that involves replacement of the failed module.

■ Gratis Warranty Term

The gratis warranty term of the product shall be for thirty-six (36) months after the date of purchase or delivery to a designated place.
Note that after manufacture and shipment from Mitsubishi, the maximum distribution period shall be six (6) months, and the longest gratis warranty term after manufacturing shall be forty-two (42) months. The gratis warranty term of repair parts shall not exceed the gratis warranty term before repairs.

■ Gratis Warranty Range

(1) The customer shall be responsible for the primary failure diagnosis unless otherwise specified.
If requested by the customer, Mitsubishi Electric Corporation or its representative firm may carry out the primary failure diagnosis at the customer's expense.
The primary failure diagnosis will, however, be free of charge should the cause of failure be attributable to Mitsubishi Electric Corporation.
(2) The range shall be limited to normal use within the usage state, usage methods, usage environment, etc. which follow the conditions, precautions, etc. given in the instruction manual, user's manual, caution labels on the product, etc.
(3) Even within the gratis warranty term, repairs shall be charged for in the following cases.
① Failure occurring from inappropriate storage or handling, carelessness or negligence by the user. Failure caused by the user's hardware or software design.
② Failure caused by unapproved modifications, etc., to the product by the user.
③ When the Mitsubishi product is assembled into a user's device, Failure that could have been avoided if functions or structures, judged as necessary in the legal safety measures the user's device is subject to or as necessary by industry standards, had been provided.
④ Failure that could have been avoided if consumable parts designated in the user's manual etc. had been correctly serviced or replaced.
⑤ Replacing consumable parts such as the battery, backlight and fuses.
⑥ Failure caused by external irresistible forces such as fires or abnormal voltages, and Failure caused by force majeure such as earthquakes, lightning, wind and water damage.
⑦ Failure caused by reasons unpredictable by scientific technology standards at time of shipment from Mitsubishi.
⑧ Any other failure found not to be the responsibility of Mitsubishi or that admitted not to be so by the user.

Onerous repair term after discontinuation of production

(1) Mitsubishi shall accept onerous product repairs for seven (7) years after production of the product is discontinued. Discontinuation of production shall be notified with Mitsubishi Technical Bulletins, etc.
(2) Product supply (including repair parts) is not available after production is discontinued.

Overseas service

Overseas, repairs shall be accepted by Mitsubishi's local overseas FA Center. Note that the repair conditions at each FA Center may differ.

Exclusion of loss in opportunity and secondary loss from warranty liability

Regardless of the gratis warranty term, Mitsubishi shall not be liable for compensation to damages caused by any cause found not to be the responsibility of Mitsubishi, loss in opportunity, lost profits incurred to the user by Failures of Mitsubishi products, special damages and secondary damages whether foreseeable or not, compensation for accidents, and compensation for damages to products other than Mitsubishi products, replacement by the user, maintenance of on-site equipment, start-up test run and other tasks.

Changes in product specifications

The specifications given in the catalogs, manuals or technical documents are subject to change without prior notice.

Product application

(1) In using the Mitsubishi graphic operation terminal, the usage conditions shall be that the application will not lead to a major accident even if any problem or fault should occur in the graphic operation terminal device, and that backup and fail-safe functions are systematically provided outside of the device for any problem or fault.
(2) The Mitsubishi graphic operation terminal has been designed and manufactured for applications in general industries, etc.
Thus, applications in which the public could be affected such as in nuclear power plants and other power plants operated by respective power companies, and applications in which a special quality assurance system is required, such as for Railway companies or Public service purposes shall be excluded from the graphic operation terminal applications.
In addition, applications in which human life or property that could be greatly affected, such as in aircraft, medical applications, incineration and fuel devices, manned transportation equipment for recreation and amusement, and safety devices, shall also be excluded from the graphic operation terminal range of applications.
However, in certain cases, some applications may be possible, providing the user consults the local Mitsubishi representative outlining the special requirements of the project, and providing that all parties concerned agree to the special circumstances, solely at our discretion.
In some of these cases, however, Mitsubishi Electric Corporation may consider the possibility of an application, provided that the customer notifies Mitsubishi Electric Corporation of the intention, the application is clearly defined and any special quality is not required.

Mitsubishi Graphic Operation Terminal

Precautions for Choosing the Products

This handbook explains the typical features and functions of the GOT1000 series HMI and does not provide restrictions and other information on usage and module combinations.
When using the products, always read the user's manuals of the products.
Mitsubishi will not be held liable for damage caused by factors found not to be the cause of Mitsubishi; machine damage or lost profits caused by faults in the Mitsubishi products; damage, secondary damage, accident compensation caused by special factors unpredictable by Mitsubishi; damages to products other than Mitsubishi products; and to other duties.

⚠ For safe use

- To use the products given in this handbook properly, always read the related manuals before starting to use them.
- The products within this handbook have been manufactured as general-purpose parts for general industries and have not been designed or manufactured to be incorporated into any devices or systems used in purpose related to human life.
- Before using any product for special purposes such as nuclear power, electric power, aerospace, medicine or passenger movement vehicles, consult with Mitsubishi.
- The products within this handbook have been manufactured under strict quality control. However, when installing the product where major accidents or losses could occur if the product fails, install appropriate backup or failsafe functions in the system.

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L(NA)08087ENG-C 0901(MEE)

New publication, effective Jan. 2009
Specifications subject to change without notice.