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SAFETY PRECAUTIONS (Always read these precautions before using this equipment.)

Before using this product, please read this manual and the relevant manuals introduced in this manual carefully and pay full attention to safety to handle the product correctly.

- WARNING: Indicates that incorrect handling may cause hazardous conditions, resulting in death or severe injury. CAUTION: Indicates that incorrect handling may cause hazardous conditions, resulting in medium or slight personal injury or physical damage.

Note that the CAUTION level may lead to a serious accident according to the circumstances. Always follow the precautions of both levels because they are important to personal safety.

MOUNTING PRECAUTIONS

- WARNING: Be sure to shut off all phases of the external power supply used by the system before mounting or removing the GOT main unit from the panel. When connecting the battery, wear an earth band to avoid damage caused by static electricity.

MOUNTING PRECAUTIONS

- CAUTION: Use the GOT in the environment that satisfies the general specifications described in this manual. When mounting the GOT to the control panel, tighten the mounting screws in the specified torque range.

DESIGN PRECAUTIONS

- WARNING: Some failures of the GOT, communication unit or cable may keep the outputs on or off. An external monitoring circuit should be provided to check for output signals which may lead to a serious accident.

CAUTION

- Do not bundle the control and communication cables with main-circuit, power or other wiring. Run the above cables separately from such wiring and keep them a minimum of 100mm apart.

DESIGN PRECAUTIONS

- CAUTION: When the GOT is connected to the Ethernet network, the available IP address is restricted according to the system configuration.

WIRING PRECAUTIONS

- WARNING: Be sure to shut off all phases of the external power supply used by the system before wiring.

CAUTION

- Always ground the FG terminal, LG terminal, and protective ground terminal of the GOT power to the protective ground conductors dedicated to the GOT. Do not touch the display section while the GOT is in operation.

TEST OPERATION PRECAUTIONS

- WARNING: Before performing the test operations of the user creation monitor screen (such as turning ON or OFF bit device, changing the word device current value, changing the settings or current values of the timer or counter, and changing the buffer memory current value), read through the manual carefully and make yourself familiar with the operation method.

STARTUP/MAINTENANCE PRECAUTIONS

- WARNING: When power is on, do not touch the terminals. Do not touch the terminals. Do not touch the terminals.

STARTUP/MAINTENANCE PRECAUTIONS

- WARNING: Before starting cleaning or terminal screw retightening, always switch off the power externally in all phases.

CAUTION

- Do not disassemble or modify the unit. Doing so can cause a failure, malfunction, injury or fire. Do not touch the conductive and electronic parts of the unit directly.

TOUCH PANEL PRECAUTIONS

CAUTION

- For the analog-resistive film type touch panels, normally the adjustment is not required. However, the difference between a touched position and the object position may occur as the period of use elapses.

BACKLIGHT REPLACEMENT PRECAUTIONS

WARNING

- Before replacing the backlight, be sure to switch off the GOT power supply externally for all phases and remove the GOT unit from the control panel.

CAUTION

- When replacing the backlight, use the gloves. Otherwise, it may cause you to be injured. Start changing the backlight more than 5 minutes after switching the GOT power off.

DISPOSAL PRECAUTIONS

CAUTION

- When disposing of this product, treat it as industrial waste. When disposing of batteries, separate them from other wastes according to the local regulations.

TRANSPORTATION PRECAUTIONS

CAUTION

- When transporting lithium batteries, make sure to treat them based on the transport regulations. (Refer to the User's Manual of the GOT to be used for details of the regulated models.)

Compliance with the Radio Waves Act (South Korea)

This product complies with the Radio Waves Act (South Korea). Note the following when using the product in South Korea.

이 기기는 업무용 (A급) 전자파적합기기로서 판매자 또는 사용자는 이 점을 주의하시기 바라며, 가전외의 지역에서 사용하는 것을 목적으로 합니다.

Packing List

The GOT product package includes the following:

Table with 3 columns: Model, Description, Quantity. Lists GOT, Installation fitting, and GT12 General Description.

1. OVERVIEW

This manual describes different functions between the GT1275-VNBA, GT1275-VNBD, GT1265-VNBA, GT1265-VNBD (hereinafter referred to as GT11).

- (1) Option functions available on the standard. No option function board is required for using the option functions.

- (2) Large model line up. For screen sizes, there is a 10.4 type (for the GT1675) and an 8.4 type (for the GT1665) available for large models.

- (3) Expanding user memory. On the GT11, the capacity for the user memory is 3MB, whereas it is possible to use 9MB on the GT12 for user memory.

2. FEATURES

- (1) Improved monitoring performance and connectivity to FA devices. Provides multi-language display function based on Unicode2.1 True Type font and produces clear, beautiful text through high grade font.

3. PART NAMES AND SETTINGS

The following shows the part names for GT1275 and GT1265.

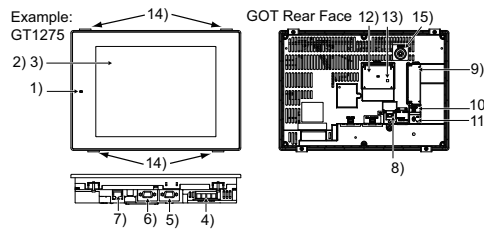


Table with 3 columns: No., Name, Description. Lists components like POWER LED, Display screen, Touch key, Power terminal, etc.

4. SPECIFICATIONS

4.1 General Specifications

Table with 2 columns: Item, Specifications. Lists operating ambient temperature, storage ambient temperature, humidity, vibration resistance, etc.

*1: Do not use or store the GOT under pressure higher than the atmospheric pressure of altitude 0m (0ft).

*2: This index indicates the degree to which conductive material is generated in the environment where the equipment is used.

*3: This index indicates the degree to which conductive material is generated in the environment where the equipment is used.

*4: This index indicates the degree to which conductive material is generated in the environment where the equipment is used.

Refer to GT12 Supplementary Description for details on the performance specifications of each GOT.

4.2 Power Supply Specifications

The following indicates the power supply specifications for GT12. For GOTs powered from the 100 to 240VAC power supply. For GOTs powered from the 24VDC power supply.

Table with 2 columns: Item, Specifications. Lists input power supply voltage, input frequency, input max. apparent power, etc.

4.2.1 For GOTs powered from the 100 to 240VAC power supply

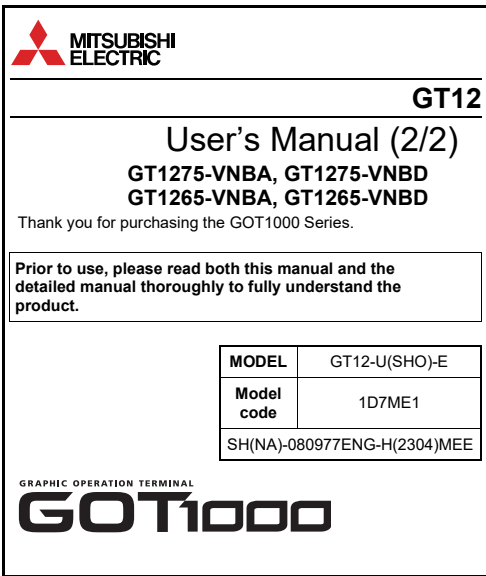
Table with 2 columns: Item, Specifications. Lists input power supply voltage, power consumption, inrush current, etc.

4.2.2 For GOTs powered from the 24VDC power supply

Table with 2 columns: Item, Specifications. Lists input power supply voltage, power consumption, inrush current, etc.

*1: In this product, the surge absorber is connected between the power supply and the ground to avoid a malfunction due to noise caused by the application of lightning surge.

© 2011 MITSUBISHI ELECTRIC CORPORATION. *Before using the GOT, connect the GOT connector with the battery connector for the battery purchased by the customer. Refer to the GT11 User's Manual for the connection method.



7. SPECIFICATION FUNCTION COMPARISON FOR GT12 AND GT11

The table overview shows the different specifications and functions available on the GT12 and the GT11.
For details of each function, refer to the relevant manual.
(1) Hardware comparison
The following shows the differences in hardware on the GT12 and the GT11.

Item	GT12				GT11		Relevant manual	
	GT1275-VNBA	GT1275-VNBD	GT1265-VNBA	GT1265-VNBD	GT1155-QSBD	GT1155-QLBD		
Display section	Type	TFT color liquid crystal display				STN color liquid crystal display	STN monochrome liquid crystal display (white/black)	GT11 User's Manual (Hardware)
	Screen size	10.4"		8.4"		5.7"		
	Resolution	640 × 480 [dots]				320 × 240 [dots]		
	Display size	211(8.31)(W) × 158(6.22)(H) [mm](inch)		171(6.73)(W) × 128(5.04)(H) [mm](inch)		115(4.53)(W) × 86(3.39)(H) [mm](inch)		
	Character display count	16-dot standard font: 40 characters 30 lines (2byte character) 12-dot standard font: 53 characters 40 lines (2byte character)				16-dot standard font: 20 characters 15 lines (2byte character) 12-dot standard font: 26 characters 20 lines (2byte character)		
	Color display	256 colors				256 colors	Monochrome (white/black) 16 Scales	
	Display angle	Left/Right: 45 degrees Top/Bottom: 20 degrees				Left/Right: 50 degrees Top: 50 degrees Bottom: 60 degrees	Left/Right: 45 degrees Top: 20 degrees Bottom: 40 degrees	
	Contrast adjustment	-				16-level adjustment		
	Intensity of LCD only	200[cd/m ²] (Adjustable in 4 levels)				380[cd/m ²] (Adjustable in 8 levels)	220[cd/m ²] (Adjustable in 8 levels)	
	Life	Approx. 52,000 h (Operating ambient temperature: 25°C)				Approx. 50,000 h (Operating ambient temperature: 25°C)		
Backlight	Life	Approx. 50,000 h or longer (Time when display luminance reaches 50% at the operating ambient temperature of 25°C)		Approx. 40,000 h or longer (Time when display luminance reaches 50% at the operating ambient temperature of 25°C)		Approx. 75,000 h or longer	Approx. 54,000 h or longer	GT11 User's Manual (Hardware)
	Type	Analog resistive film				Matrix resistive film		
Touch panel	Number of touch keys	-				300 keys/screen (Matrix structure of 15 lines × 20 columns)		GT16 User's Manual (Hardware) GT11 User's Manual
	Key size	Minimum 2 × 2 [dots] (per key)				Maximum 16 × 16 [dots] (per key)		
	Number of objects that can be simultaneously touched	Simultaneous presses not allowed. (Only 1 point can be touched.)				Maximum of 2 points		
Memory	C drive	Built-in flash memory 9MB ¹				Built-in flash memory 3MB		GT11 User's Manual
	USB (device)	○ (Rear side)				× (Front side)		
Built-in interface	Option function board	Option functions supported as standard				Option function board is necessary for option function use		GT16 User's Manual (Hardware)
	Ethernet	○				×		

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Item	GT12				GT11		Relevant manual
	GT1275-VNBA	GT1275-VNBD	GT1265-VNBA	GT1265-VNBD	GT1155-QSBD	GT1155-QLBD	
External dimensions	303(11.93)(W) × 214(8.43)(H) × 53(2.09)(D) [mm](inch)		241(9.49)(W) × 190(7.48)(H) × 58(2.29)(D) [mm](inch)		164(6.46)(W) × 135(5.32)(H) × 56(2.21)(D) [mm](inch)		GT11 User's Manual
Panel cutting dimensions	289(11.38)(W) × 200(7.87)(H) [mm](inch)		227(8.94)(W) × 176(6.93)(H) [mm](inch)		153(6.03)(W) × 121(4.77)(H) [mm] (inch)		
Weight (mounting fixtures are not included)	2.3kg(5.1lb)		1.7kg(3.7lb)		0.7kg(1.5lb)		
Power supply	100 to 240VAC	24VDC	100 to 240VAC	24VDC	DC24V		

*1: The limit for available storage for project data is 6MB.

(2) Option comparison
The following shows the differences in options on the GT12 and the GT11.

○ : Supported × : Not supported

Item	GT12		GT11		Relevant manual
	GT1275-VNBA, GT1275-VNBD	GT1265-VNBA, GT1265-VNBD	GT1155-QSBD, GT1155-QLBD		
Protective sheet	Clear	GT11-70PSCB	GT11-60PSCB	GT11-50PSCB	GT11 User's Manual
	Antiglare	×		GT11-50PSGB	
	Clear (Frame: white)	×		GT11-50PSCW	
	Antiglare (Frame: white)	×		GT11-50PSGW	
Battery	GT11-50BAT	○ ^{*1}	○ (Pre-attached for shipment)		
Attachment	GT15-70 ATT-98	○	×	×	GT16 User's Manual (Hardware)
	GT15-70 ATT-87	○	×	×	
	GT15-60 ATT-97	×	○	×	
	GT15-60 ATT-96	×	○	×	
	GT15-60 ATT-87	×	○	×	
	GT15-60 ATT-77	×	○	×	
Stand	GT15-70STAND		GT05-50STAND		GT16 User's Manual (Hardware)
Backlight	GT12-70VLTN	GT12-60VLTN	Replacement unavailable		GT11 User's Manual

*1 : The GOT automatically formats the D drive (SRAM) when the battery is not attached.
Attach the battery to keep clock and alarm history data.

(3) Function comparison
The following shows the differences in functions on the GT12 and the GT11.
For details of the utility screen, refer to the GT16 User's Manual.

○ : Supported × : Not supported - : Not necessary

Item	GT12		GT11		Relevant manual
	GT1275-VNBA, GT1275-VNBD, GT1265-VNBA, GT1265-VNBD		GT1155-QSBD, GT1155-QLBD		
Shape	Rounded, rectangle	○	○		Screen Design Manual (Fundamentals)
GOT internal device	GB	65536 points	65536 points		
	GD	65536 points	65536 points		
Vertical format		×	○		
Screen changing	Memory card storage for screen transition history	○	○		
ASCII input/display	Text alignment	○	○		
Historical data list display	Maximum number of objects per screen	1	×		
Date display/time display	View format	Date: 20 types Time: 6 types	Date: 20 types Time: 6 types		
User alarm	Alarm (device) points	Maximum 8192	Maximum 8192		
Alarm history	Alarm (device) points	3072	3072		
	Alarm history recorded	D drive: 2048 records A drive: 3072 records	D drive: 2048 records A drive: 3072 records		
	File storage location	D drive, A drive	D drive, A drive		
Alarm display function		Popup display	Scrolling display		
Advanced alarm observation		○	×		
	Advanced user alarm function	D drive, A drive (Number of alarms : 8)	×		
	Advanced system alarm function	D drive, A drive	×		
Line graph	Scale points	101	101		
Trend graph	Scale points	101	101		
Bar graph	Scale points	101	101		
Statistics bar graph	Scale points	101	101		
Statistics pie graph	Scale points	101	101		
Scatter graph	Scale points	101	101		
Circle graph	Scale points	101	101		

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Item	GT12	GT11	Relevant manual
	GT1275-VNBA, GT1275-VNBD, GT1265-VNBA, GT1265-VNBD	GT1155-QSBD, GT1155-QLBD	
Historical trend graph	○	×	Screen Design Manual (Functions)
Points	300 points	-	
Number of pens	8 lines	-	
Number of objects on a screen	1	-	
Logging function	○	×	
Cycle (logging trigger)	500ms (minimum value)	-	
Number of settings	4	-	
Recipe function	○ ¹	○ ¹	
Recipe count	8192 points is total for all recipe settings	8192 points per 1 recipe setting	
Recipe file storage location	D drive, A drive	D drive, A drive	
Bar code function	○	○	GT16 User's Manual
RFID function	○	○	
Hard copy function ²	○	×	
Hard copy file storage location	A drive	-	
Maximum number of files	100	-	
FA transparent function	○	×	
GOT maintenance function	GOT start time ○	×	
Multi-channel function	○ (Maximum 2 ch.)	×	
FTP server function	○	×	
System monitoring function	○	×	
A list editor function	○ ¹	○ ¹	GOT1000 Series User's Manual (Extended Functions, Option Functions)
FX list editor function	○ ¹	○ ¹	
Back-up/restore function	○	×	GOT1000 Series User's Manual (Extended Functions, Option Functions)
GOT data package acquisition	○	×	
Software package support	GT Designer3 English version: Version 1.01B or later	GT Designer3 Japanese version: Version 1.00A or later English version: Version 1.01B or later GT Designer2 Japanese version: Version 2.25B or later English version: Version 2.27D or later	-

¹: An option function board is required for the GT11.

No option function board is required for the GT12.

²: When the file number is between 90 and 100, the system signal 2-1.b12 (hard copy auxiliary signal) turns on. The signal notifies that the number of files in a CF card has reached almost the maximum (100).

(4) GT Designer3 comparison

The following shows the differences in settings for GT Designer3 on the GT12 and the GT11.



When designing GT12 screens, BMP and JPEG format files can be used for parts display and parts movement images.

Item		GT12	GT11	Relevant manual
Model setting	Model	GT12**-V(640×480)	GT11**-Q(320×240)	Screen Design Manual (Fundamentals)
	Setting / installation direction	Horizontal and vertical option not available	Horizontal and vertical option available	
	Color setting	256 colors	Monochrome 16 adjustment level, 256 colors	
Connection device setting	CH1	I/F Standard I/F(RS422/485) Standard I/F(RS232) Standard I/F(Ethernet)	Standard I/F(RS422/232) Standard I/F(RS232)	
	CH2	I/F Standard I/F(RS422/485) Standard I/F(RS232) Standard I/F(Ethernet)	I/F none	


(5) GT Simulator3 comparison

The following shows the differences in functions for [GOT1000 series GT12 simulator] and [GOT1000 series GT11 simulator] on GT Simulator3. To use the GT12 simulation functions on GT Simulator3, select [GOT1000 series GT12 simulator] in the main menu dialog box on GT Simulator3. If no differences exist in the simulation function for [GOT1000 series GT12 simulator] and [GOT1000 series GT11 simulator] on GT Simulator3, the specifications are the same as that for the hardware.

For details of the hardware specifications, refer to the following.

-  (1) Hardware comparison
-  (3) Function comparison

For details of the functions and the utility to operate the GT12, refer to the following.

 GT Simulator3 Version1 Operating Manual for GT Works3 (3.2 Functions that cannot be simulated)

○ : Supported × : Not supported

Item		GOT1000 series (GT12) simulator	GOT1000 series (GT11) simulator	Relevant manual
Option	Action setup	GT12**-V	GT11**-Q	GT Simulator3 Version1 Operating Manual for GT Works3
	Resolution ¹	640 × 480 [dots]	320 × 240 [dots]	
Color display ¹		256 colors	256 colors	
Memory ¹		9MB	3MB	
Advanced alarm observation		○ ²	×	
Historical trend graph		○ ²	×	
Logging function		○ ²	×	
Hard copy function		○ ²	×	
Software package support ³		GT Designer3 English version: Version 1.14Q or later	GT Designer3 English version: Version 1.01B or later	

¹ : For details of the specifications, refer to (1) Hardware comparison.

² : For details of the functions, refer to (3) Function comparison.

³ : GT Simulator3 is installed or uninstalled automatically when GT Designer3 is installed or uninstalled.

(6) Installation comparison

The installation method of the GT12 is the same as that for the GT1155.

For details of the installation, refer to the following.

 GT11 User's Manual

(7) Wiring comparison

Use the same wiring methods of GT16 to configure the GT12 wirings.


For details of the wiring, refer to the following.

 GT16 User's Manual (Hardware)

(8) Utility function comparison

The operation method of the utility function of the GT12 is the same as that for the GT16.

For details on the operation method of the utility function, refer to the following.

 GT16 User's Manual (Basic Utility)

(9) Message displaying language selectable by utility

For the GT12, the message displaying language selectable by the utility is the same as that for the GT11.

For details of the relationship between the message displaying language selectable by the utility and the standard font, refer to the following.

 GT Designer3 Version1 Screen Design Manual (Fundamentals)

Warranty

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

- This product has been manufactured as a general-purpose part for general industries, and has not been designed or manufactured to be incorporated in a device or system used in purposes related to human life.
- Before using the product for special purposes such as nuclear power, electric power, aerospace, medicine or passenger movement vehicles, consult with Mitsubishi.
- This product has 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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When exported from Japan, this manual does not require application to the Ministry of Economy, Trade and Industry for service transaction permission.

Specifications subject to change without notice.