Changes for the Better



Mitsubishi Graphic Operation Terminal GOT1000 Series

Tailored solutions to meet your HMI and visualization needs





Motion Controllers and Servos Amplifiers CNCs

Automation Platforms and Programmable Controllers

Vision Systems

The GOT1000 delivers the competitive advantage:

The speed of your business and the speed of your machine hinges on many forces outside of your control. The GOT1000 brings them back under control with speed, performance and industry leading functions that are tailored for visualization - real life solutions for your real time process. Whether your focus is centered on uptime, productivity or serviceability there is a GOT solution that fits your machine, factory and enterprise level requirements. GOTs evolve the face of control.

CASE STUDY 1

Have you ever needed an HMI to do more than provide pretty panel meters? The GOT1000 does more than just visualization, it provides solutions for both the everyday, and not so everyday problem.

CASE STUDY 2

Solutions for your FA Device: Innovative solutions for improving uptime, work efficiency and productivity using the GOT1000 and your FA equipment. **GOT Solutions**



LINE-UP

Five models of the GOT1000 Series to fit demanding

systems and tight budgets.



software GT Works2/GT Designer 2.



*: The GT16 -- VNB, GT1655-VTBD, GT1665HS-VTBD, GT12 -- VNB and GT1030 high contrast product (GT1030-H -- -- -- --) are not supported by the screen design

CASE STUDY 1

GOTIDO **GOT Solutions** Quick response to problems. Easy facility design with the GOT1000 series. A comprehensive solution to production site problems.

CASE 1

Facility uptime is increased by reducing unexpected errors on the floor.





Equipment availability is greatly improved when GOTs are used to quickly edit PLC programs.



CASE 3

Downtime is shorten when debugging can be performed locally or over decentralized systems.





Production efficiency is maintained when the GOT is used to manage product changeovers and maintenance recovery plans.



CASESTUDY 1 GOT Solutions

CASE 5

Operator efficiency is improved when manuals and work instructions can be accessed directly from the display.



CASE 6

Production quality can be increased when using the GOT to capture and play back real time videos and images.

CASE 7

Minimize production mistakes by using the GOT to manage authorization and security levels.

Reduce installation costs by using flexible mounting options.

CASE STUDY 2

FASOUTIONS Obstacles are often encountered when using many different types of FA devices. The following problems can be resolved by linking with GOT1000.

Powerful functionality that is useful during startup and the tuning process!

Can the program be debugged without opening the panel?

FA transparent function

Connected with a personal computer, the GOT acts as a transparent gateway to enable programming, start up, and adjustment of equipment using GX Works2 or GX LogViewer. Users do not have to bother with opening the cabinet or changing cable connections. (On the GT10 series. the FA transparent function can be used via the interface on the rear side.)

Can the PLC programs be recovered after failure?

Backup/restoration function

Sequence programs and parameters can be backed up to the CF card or USB memory in the GOT. Users can then perform batch operation to restore the data to the PLC.

Can the PLC status or errors be checked quickly?

System monitor function

PLC devices can be monitored and changed

Intelligent module monitor function

Buffer memory values and I/O information can be monitored and changed.

Network monitor function

Enable monitoring of network line conditions on a dedicated screen.

Network module status display

Enable monitoring of LED status, error status, among others of network modules on a GOT.

MELSEC-L troubleshooting functiion

A dedicated maintenance screen for the L series is included. The CPU status and error information can be easily confirmed without a personal computer. If a problem occurs, you can jump to a function screen such as the ladder monitor to quickly take corrective actions

Ideal for PLCs in the field and on the plant floor!

Using the MELSEC-L series or high-speed data logger module!

Log viewer function

Logging data collected using the L series or high-speed data logger module can be displayed on the GOT.

SFC monitor function

The Q series (Q mode) SFC programs (MELSAP3, MELSAP-L) can be monitored in a SFC diagram format.

Can simple changes to ladder programs be made without a personal computer?

Ladder editor function

Sequence programs of the Q series (Q mode) and the L series can be edited in a circuit diagram (ladder format).

Monitoring batch control!

Can Process and Batch monitoring be simplified?

Building a process control system using GOT1000

PX Developer creates GOT process control screens automatically

The automatically generated data can be used for both the GOT (worksite) and GT SoftGOT1000 (monitor

room), and therefore monitor screens can be created efficiently

Powerful functionality that is useful during startup and the tuning process!

Can devices in the motion controller be validated?

changing cable connections.

System monitor function

Motion controller devices can be monitored and changed.

For direct connection of servo amplifiers to GOTs!

Servo amplifier monitor function

In a system which outputs pulse train, the GOT can be connected to a servo amplifier in a serial connection to perform the following operations: monitoring, alarm display, diagnosis, parameter setting, and test operations.

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Ideal for motion controllers in the field and on the plant floor!

The GOT enables easy monitoring of motion controllers (Q series), changing of servo parameters, and display of errors on the screen.

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Can motion profiles be recovered after controller failures?

Embedded functionality for positioning modules!

Intelligent module monitor function

Buffer memory values of modules such as the QD75MH and I/O information can be monitored and changed.

Motion controller (Q series) SFC programs can be monitored in SFC diagram format. Viewing the batch program monitor or the active step list enables you to see the complete status at a glance.

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Backup/restoration function

Motion controller (Q series) programs and parameters can be backed up onto a CF card or USB memory in the GOT. Users can perform batch operation to restore the data to the motion controller.

Other convenient uses!

When used in combination with the FA transparent function, the positioning module can be efficiently debugged. If an error occurs in the positioning module, the details of the error can be confirmed using just the GOT.

FA Solutions

Ideal for inverter operation!

Can the inverter status be monitored on the GOT?

Ideal for inverter startups and operation!

Can connections to the inverter be simplified?

Directly connect inverters

Up to 31 inverters can be connected to a single GOT over a total distance of 500m.

FREQROL-F700P/F700PJ inverters can automatically configure the communication parameters for GOT connection, making connections easy.

FA transparent function

Connected with a personal computer, the GOT acts as a transparent gateway to enable startup and adjustment of equipment using FR Configurator. Users do not have to bother with opening the cabinet or changing cable connections.

Can inverter parameters be changed easily?

Ready-to-use sample screens

Sample screen data for specifying parameters is available.

Easy-to-understand display

Operation commands and parameters can be set from a GOT. On the GT1020/GT1030, three different backlight colors can be switched between screens, making it easy for operators to read and operate the screens.

Example of GT1020 parameter screen

0. Torque Boosto123.5%	MENU
1. Max Frequency 012. 45Hz	Set
2. Min Frequency012.45Hz	Range
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Example of GT1030 operation screen

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		Alarm display	Phil	BOTU

	Alarm display
Alarm information Latest alarm E.O. Second Brevious alarm E.O. Third previous alarm E.O. Fourth previous alarm E.O. Barth previous alarm E.O. Second previous alarm E.O. Second previous alarm E.O.	Batch monitor display- Set trequency (RAM) 012.34Hz Output frequency 012.34Hz Output requency 012.34Hz Output voltage 012.3V C2 Dutput voltage 012.3V I Stat the the waset to active. Other as that Running speed 0123(s/sin) Running speed 0123(s/sin) Running speed 012.4% Running speed 012.4% R
ingering sealant darm E.O.	Motor load factor 0123,5% Motor output 012,45k%

GOT Solutions

Powerful functions for robotic systems!

Can the teaching box and the personal computer used for setup be consolidated into a single unit?

Consolidate and centralize robot monitoring and control functions on production floor using the GOT

Even if a teaching box is not available, the GOT can be used to operate the robot and easily check the current position data and error details. Consolidating panel operations into the GOT improves operation and maintenance work efficiency.

Robot information (current speed/attainment rate, etc.)

Robot programming

engineering software

Ideal for robot programming!

Can the robot program be easily accessed?

Robot operation panel screer

UP A DN [Current] ±1) ±7) ±10 ±15

STOP Robot load rate/current value monitor screen

Robot maintenance forecast screet

Can the program be debugged without opening the panel?

FA transparent function

Connected with a personal computer, the GOT acts as a transparent gateway to enable start up and adjustment of equipment using RT ToolBox2. Users do not have to bother with opening the cabinet or changing cable connections.

In the event of trouble!

Can robot profiles be recovered after controller failures?

Backup/restoration function

Robot controller data can be backed up to the CF card or USB memory in the GOT. Users can perform batch operation to restore the data to the robot controller.

FA Solutions

Ready-to-use sample screens

Sample screen data is available for robot operation, current position monitoring, and other purposes. There is no need to create robot programs from scratch.

Robot jog/hand operation screen

Robot manual menu screen

Can devices in the robot controller be validated?

System monitor function

Embedded monitoring utilities are available enabling users to view and change device values.

Powerful function for CNC startup, machining and changeover!

Can CNC parameters be changed easily?

CNC monitor function

The CNC C70 and MELDAS C6/C64 can be monitored and the parameters can be changed.

Can CNC devices be easily validated?

Can errors or the status of the CNC be validated quickly?

CNC data I/O function

Data, such as machining programs and parameters, can be copied from a GOT CF card or USB memory to the CNC C70 and vice versa. Data can be deleted as well.

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System monitor function

Embedded monitoring utilities are available enabling users to view and change CNC C70 and MELDAS C6/64 device values.

Can the program be debugged (without opening the panel?

Ideal for CNC programming!

Can CNC programs be validated directly from the GOT?

Can the root cause be easily identified?

One-touch ladder jump function

By setting a program name and coil number of the CNC C70 to a touch switch, the relevant ladder circuit block can be displayed directly. Problems can be handled smoothly from the alarm screen.

In the event of trouble!

FA transparent function

Connected with a personal computer, the GOT acts as a transparent gateway to enable start up and adjustment of equipment using NC Configurator, etc. Users do not have to bother with opening the cabinet or changing cable connections

Ladder monitor function

CNC C70 and MELDAS C6/C64 sequence programs can be monitored in a circuit diagram (ladder format).

Can programs be changed easily without a personal computer?

Ladder editor function

Sequence programs of the CNC C70 can be edited in a circuit diagram (ladder format).

Powerful functions for vision systems!

Can automation and vision systems be consolidated into a platform?

Displaying the In-Sight Series processing results on the GOT

By connecting a GOT to the In-Sight Series and PLC over Ethernet, the In-Sight Series processing results can be displayed and parameters can be changed on the GOT. The GT16 model has a standard Ethernet port, allowing the system to be built easily.

Can other COGNEX products be connected?

The In-Sight vision system and DataMan barcode reader can be connected to the GOT.

Ideal for configuration!

Can vision parameters be changed from the GOT?

[Alignment screen]

The workpiece position and posture detected with In-Sight Series as well as the success or failure state of the detection are displayed. The workpiece detection threshold can be changed from this screen.

[Inspection screen] The results of workpiece inspections carried out with the In-Sight Series are displayed. The workpiece detection threshold can be changed.

mosouri	
Inspectio	n Result
Result:	PASS
Change Pa	raneter
Territold	30

Ideal for monitoring operations!

Can vision applications be handled easily at the worksite?

FA Solutions

Ready-to-use sample screens

Sample screen data is available for checking the results of positioning, inspection, and reading characters.

The results of reading ID codes with the In-Sight Series are displayed. The reading mode (read/verify or change character string during verification) can be selected.

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Mode	
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Recognition Result:	11.000
Result: AB05600	here 31 m.
Job Result:	autoria.
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Displaying In-Sight Series vision applications on the GOT

Connect the COGNEX VisionView VGA with the GOT to display the In-Sight Series Vision Application screen. While monitoring connected devices such as PLCs, it is possible to switch to the Vision Application screen when necessary to display live images, specify parameters with touch operations, and perform other operations.

> * : A RS-232 connection is required to directly exchange data with GOT and Dataman. (Ethernet connection is not supported.)

MEMO	MEMO
	Misubishi Electric Corporation Nagoya Works and Himeji Works are factories certified for ISO14001 (standards for environmental management systems) and ISO9001 (standards for quality assurance management systems).

Mitsubishi Graphic Operation Terminal

Precautions for Choosing the Products

This catalog 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 catalog properly, always read the related manuals before starting to use them.

- The products within this catalog 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 catalog 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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