MITSUBISHI ELECTRIC

Changes for the Better

Mitsubishi iQ Platform-compatible
Graphic Operation Terminal
GOT1000 Series [GT12 Model]

October 2009 **New Product Release**

GRAPHIC OPERATION TERMINAL
GOT1000

GT12
Debut!

10.4 inch

8.4 inch

Cost Effective **Large-Size** **Built-in Ethernet**

Large-size models with built-in Ethernet in the standard model range!

iQ Platform

GOT1000 Comprehensive Lineup

Including the new, cost-effective GT12 Series models, a total of 73 models provides the widest range of display options for the OEM machine builder and End User facility installation.

GT12 NEW

Fully integrated models now released!

GT12 10.4 inch and 8.4 inch models

Integrated hardware and functionality is now available in large-size models.

	Full-spec Model	Full-spec Model	Standard Model	Standard Model	Compact Model
	With a variety of integrated functions, such as Ethernet and multimedia	Wide range of uses from network to stand alone	Standard functions with built-in Ethernet	Enhanced with basic functions for stand alone application	Including all the basic functions required for a HMI display

Screen Size — Large ↕ Small

GT16 / GT15 / GT12

Size	GT16	GT15	GT12
15"	GT1695M-XTBA GT1695M-XTBD	GT1595-XTBA GT1595-XTBD	
12.1"	GT1685M-STBA GT1685M-STBD	GT1585V-STBA GT1585V-STBD GT1585-STBA GT1585-STBD	
10.4"	GT1675M-STBA GT1675M-STBD GT1675M-VTBA GT1675M-VTBD	GT1575V-STBA GT1575V-STBD GT1575-STBA GT1575-VNBA GT1575-STBD GT1575-VNBD GT1575-VTBA GT1572-VNBA GT1575-VTBD GT1572-VNBD	GT12 GT1275-VNBA NEW
8.4"	GT1665M-STBA GT1665M-STBD GT1665M-VTBA GT1665M-VTBD	GT1565-VTBA GT1565-VTBD GT1562-VNBA GT1562-VNBD	GT1265-VNBA NEW
5.7"		GT1555-VTBD GT1555-QTBD GT1555-QSBD GT1550-QLBD	

GT1275-VNBA / GT1265-VNBA

GT1275-VNBA

AC type
Resolution: 640x480
Display colors: 256 colors
LCD: TFT color LCD
Safety standard : CE, UL

10.4" type

GT1265-VNBA

AC type
Resolution: 640x480
Display colors: 256 colors
LCD: TFT color LCD
Safety standard : CE, UL

8.4" type

Main unit — TFT 256 colors | Analog touch panel | VGA 640x480 | 6MB memory

External I/F — Ethernet | RS-232 | RS-422/485 | USB device | CF card

GT11 / GT10

Size	GT11	GT10
5.7"	GT1155-QTBD GT1150-QLBD GT1155-QTBDQ GT1150-QLBDQ GT1155-QTBDA GT1150-QLBDA GT1155-QSBD GT1155HS-QSBD GT1155-QSBDQ GT1150HS-QLBD GT1155-QSBDA	GT1055-QSBD GT1050-QBBD
4.7"		GT1045-QSBD GT1040-QBBD
4.5"		GT1030-LBD GT1030-LBDW GT1030-LBD2 GT1030-LBDW2 GT1030-LBL GT1030-LBLW GT1030-LWD GT1030-LWDW GT1030-LWD2 GT1030-LWDW2 GT1030-LWL GT1030-LWLW
3.7"		GT1020-LBD GT1020-LBDW GT1020-LBD2 GT1020-LBDW2 GT1020-LBL GT1020-LBLW GT1020-LWD GT1020-LWDW GT1020-LWD2 GT1020-LWDW2 GT1020-LWL GT1020-LWLW

Feature legend

	GT16	GT15	Standard Model	GT11	GT10
Multimedia	Multimedia Video/RGB	Video/RGB			
Built-in Memory	15MB	5-9MB	6MB	3MB	512KB-3MB
Built-in Interface	Ethernet USB host USB device	USB device RS-232	Ethernet USB device	USB device RS-232	RS-232
	RS-232 RS-422/485		RS-232 RS-422/485		
Built-in Interface *Depends on the model or hardware version				Bus RS-422 RS-422/232 RS-422/485	USB device RS-422 RS-422/485
Optional Interface	Bus	Ethernet Bus		CC-Link (via G4 only)	CC-Link (via G4 only)
	RS-232 RS-422 RS-422/485	RS-232 RS-422 RS-422/485			
	CC-Link IE CC-Link (ID station/via G4)	CC-Link IE CC-Link (ID station/via G4)			
	MELSECNET/H	MELSECNET/H			

* For more details about connnection destination of models other than the GT12 series, see "GOT1000 series catalog" <L(NA) 08054-E 0901>.

Stylish body

Analog touch panel

Full flat face

Flexible embedded communications

USB device

RS-232 | RS-422/485 | Ethernet | CF card

GT12, new models offer flexible configurations and expandability

A wide range of devices can be interfaced to GT12 models using Ethernet • RS-232 • RS-422/485

■ A variety of built-in interfaces
The built-in interfaces (Ethernet, RS-422/485 and RS-232) enable connection to up to two kinds of FA equipment simultaneously.
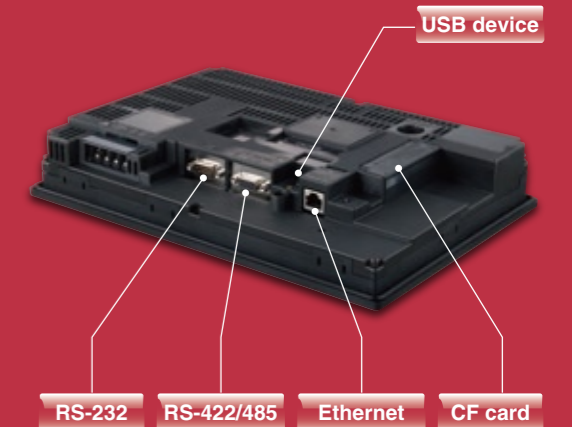
■ Ethernet helps extend systems
The built-in Ethernet interface connects to PLC CPUs with built-in Ethernet and host systems easily.

■ Wide selection of connectable FA devices and peripherals
- •Mitsubishi PLCs/motion controllers
- •Mitsubishi servo amplifiers
- •Mitsubishi inverters
- •Mitsubishi industrial robots
- •Mitsubishi CNCs
- •Microcomputers
- •Temperature controllers
- •Barcode readers
- •RFID readers
- •Third party PLCs

✽:For the connectable models and connection types, refer to GOT1000 series connection manuals.

#### Connection type to Mitsubishi PLCs/motion controllers
○ : Supported　— : Not supported

Mitsubishi PLCs/ motion controllers \ Connection type	Ethernet	CPU direct connection	Computer link	CC-Link (via G4)
MELSEC-Q series (Q mode)	○ ✽1	○ ✽2	○	○
MELSEC-Q series (A mode)	○	○	○	—
MELSEC-QnA series	○	○	○	—
MELSEC-A series	○	○	○	—
MELSEC-FX series	○	○	—	—
Motion Controller CPU (Q series)	—	○	○	○
Motion Controller CPU (A series)	—	○	○	—

✽1:QnUDE has a built-in Ethernet module; additional module is not required
✽2:Excluding QnUDE

Multi-channel function

■ The multi-channel function enables the connection of different types of FA devices simultaneously.
Up to 2 channels of equipment such as PLCs/servo amplifiers/inverters/temperature controllers can be connected and monitored.

Load on the PLC can be reduced instead of all devices being connected to the PLC.

Temperature controller
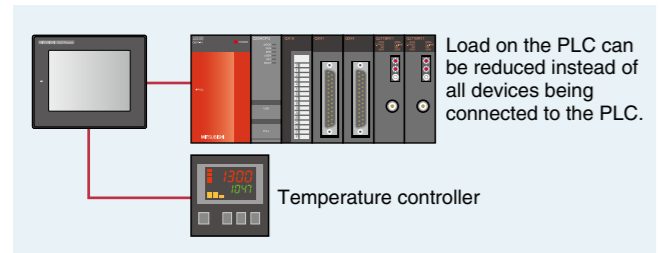
Other features

■ USB device (Mini-B, rear face)
Connecting to a personal computer via USB (Mini-B) enables the transfer of operating systems and project data. The FA transparent function enables modification of sequence programs.

■ TFT LCD VGA (640x480) monitor
TFT LCD display provides easily-viewable screens. VGA resolution provides satisfactory expressiveness.
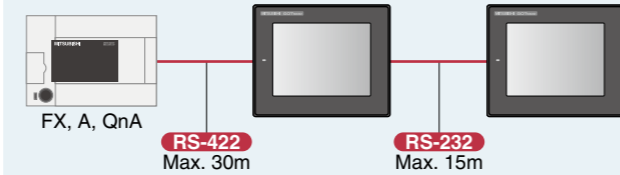
■ Analog touch panel
Objects such as push buttons and switches can be freely placed around the screen. The clear display face without grids makes it easy to recognize pictures and characters.

Multi-terminal connection

■ Up to two GT12 units can be connected to one PLC

When RS-422 is used to connect the 1st GOT ✽1

FX, A, QnA
RS-422 Max. 30m
RS-232 Max. 15m

When RS-232 is used to connect the 1st GOT ✽1

FX, Q
RS-232 Max. 15m
RS-422 Max. 30m
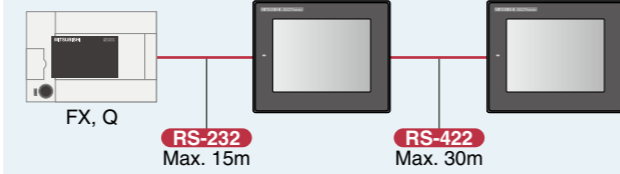
✽1:Refer to the connection manual for applicable models, required interface and compatibility with serial communication units (computer link units). The maximum length varies depending on the connected equipment. Refer to the connection manual for more details.

Multi-drop connection　Coming soon

■ Multiple GT12 units can be connected to one PLC unit via the serial multi-drop connection unit.

Serial multi-drop connection unit
FX, A, QnA, Q
GOT GOT GOT

Cable 1
Same spec. as 1:1 connection

Cable 2　RS-485

Expandable to up to 500m
(including the distance between the serial multi-drop connection unit [GT01-RS4-M] and the PLC)
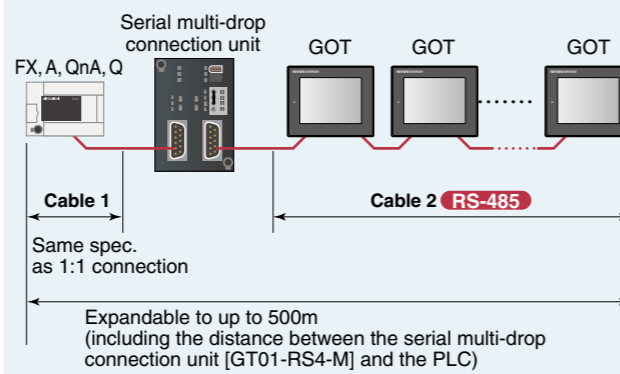
■ Ample memory capacity
The GT12 has 6MB memory so users can add a variety of objects, parts, and functions without running out of memory.

GT12	6MB
GT11	3MB
GT105□/GT104□	3MB
GT1030	1.5MB
GT1020	512KB

GT12 provides many essential functions suited for engineered solutions

Useful functions of GT12

■ Even low cost models are infused with functionality commonly found in more expensive models.
- •Multi-channel function
- •Logging function
- •Historical trend graph function
- •Backup/restore function
- •Recipe function (CSV, binary)
- •Advanced alarm function
- •A/FX list editor
- •System monitor function

■ Multi-language display (excluding KANJI region settings)

Logging function/Historical trend graph

■ Logging function
●Collecting data from temperature controllers and other units with the GOT can reduce the load on the PLC.

●Collected data can be used for archives and analytical purposes when being saved to a CF card.

PLC

Temperature controller

Buffering area (GOT memory)
CF card

Collect device data from PLCs and temperature controllers into the buffering area

Save data in the buffering area to the CF card

Analyze data in the CF card (CSV or Unicode text files) on a personal computer
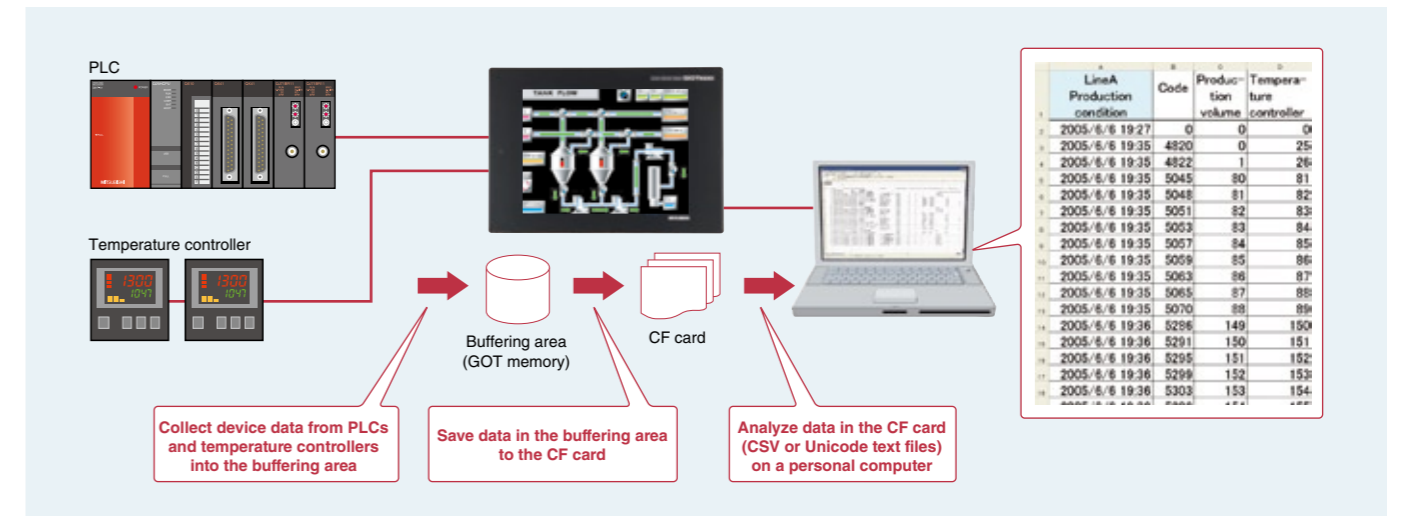
■ Historical trend graph
●Data collected by the logging function can be displayed in a time-series graph from a CF card as well as from the buffering area.

✽:Logging function settings are required to use historical trend graph.

●The data collected by the logging function can be displayed in graph form; past data can be displayed simply by touching a scroll switch.

●By specifying a date and time, a specific time can be displayed in the center of the graph.

Backup/restore function

■ Backup important sequence programs to be safe and secure in case of an emergency
●The sequence program and parameter data of the PLC CPU and motion controller can be backed up to the CF card in the GOT.

●Users can perform batch operation to restore the data to the PLC CPU or motion controller.

<Applicable data> Programs, parameters, device comments, device initial value data, file registers, etc.
<Applicable model> MELSEC Q-Series (excluding Q12PRH/Q25PRHCPU), Q-Series motion controllers (SV13/SV22 only), MELSEC FX-Series, CNC C70
<Applicable connection type> CPU direct connection, computer link connection, Ethernet connection (host only)
<Optional device> CF card

Example of use
Make a data backup in preparation for PLC CPU failure or a dead battery to quickly replace the faulty device and restore the system using the backup.

If data is backed up
CF card, etc.
Replace CPU
Sequence program, etc.
Restore
CPU direct connection
Back up

☞ PLC CPU programs can be changed easily without a personal computer at the worksite or any previous programming knowledge of GX Developer.

For more details, see "GOT1000 series catalog"<L(NA) 08054-E 0901>.

✽:When replacing the PLC CPU, the restoration function may not be available depending on the system configuration and connection type.

Function list

● : Supported — : Not supported or not applicable

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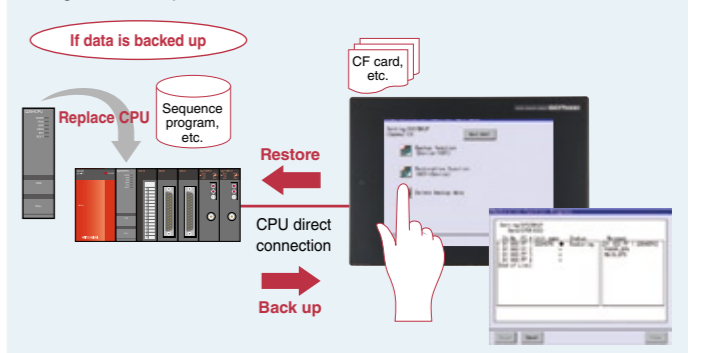| Category	Function *1	Extended/optional function OS installation	Other required devices	GT1695M-XTB□ XGA 15"	GT1685M-STB□ SVGA 12.1"	GT1675M-STB□ SVGA 10.4"	GT1675M-VTB□ VGA 10.4"	GT1665M-STB□ SVGA 8.4"	GT1665M-VTB□ VGA 8.4"	GT1275-VNBA VGA 10.4"	GT1265-VNBA VGA 8.4"	GT115□-Q□BD QVGA 5.7"	GT115□-Q□BD□ QVGA 5.7"	GT115□-HS-Q□BD QVGA 5.7"
Connection configuration	Bus connection			●	●	●	●	●	●	●	●	●	—	●
	CPU direct connection			●	●	●	●	●	●	●	●	●	—	●
	Computer link connection			●	●	●	●	●	●	●	●	●	—	●
	MELSECNET/H connection			●	●	●	●	●	●	—	—	●	—	—
	MELSECNET/10 connection			●	●	●	●	●	●	—	—	●	—	—
	CC-Link IE controller network connection			●	●	●	●	●	●	—	—	—	—	—
	CC-Link connection (ID station/via G4)			●	●	●	●	●	●	Via G4 only	Via G4 only	Via G4 only	—	Via G4 only
	Ethernet connection			●	●	●	●	●	●	●	●	—	—	—
	Third party PLC connection			●	●	●	●	●	●	●	●	●	—	●
	Microcomputer connection		*6	●	●	●	●	●	●	●	●	●	—	●
	MODBUS®/RTU connection			●	●	●	●	●	●	●	●	●	—	●
	MODBUS®/TCP connection			●	●	●	●	●	●	—	—	—	—	—
	Temperature controller connection			●	●	●	●	●	●	●	●	●	—	●
	Inverter connection			●	●	●	●	●	●	●	●	●	—	●
	Servo amplifier connection			●	●	●	●	●	●	●	●	●	—	●
	CNC connection (C6/C64): CPU direct connection			●	●	●	●	●	●	—	—	—	—	—
	MELSECNET/10 connection			●	●	●	●	●	●	—	—	—	—	—
	CC-Link (ID station) connection			●	●	●	●	●	●	—	—	—	—	—
	Ethernet connection			●	●	●	●	●	●	●	●	—	—	—
	Robot controller connection (CRnD-700)			●	●	●	●	●	●	—	—	—	—	—
Hardware specifications — Memory	Standard memory capacity			15MB	15MB	15MB	15MB	15MB	15MB	6MB	6MB	3MB	3MB	3MB
	Total memory capacity when using optional memory (standard + optional)		CF card	Up to 57MB	Up to 57MB	Up to 57MB	Up to 57MB	Up to 57MB	Up to 57MB					
Display colors	65,536 colors			●	●	●	●	●	●	—	—	●	●	—
	256 colors			—	—	—	—	—	—	●	●	GT1155-Q□BD only ●	GT1155-Q□BDQ/A only ●	GT1155-HS-QSBD only ●
	Monochrome (black/white) 16 gray scales			—	—	—	—	—	—	—	—	GT1150-QLBD only ●	GT1150-QLBDQ/A only ●	GT1150-HS-QLBD only ●
Resolution	1024 × 768 dots (XGA)			●	—	—	—	—	—	—	—	—	—	—
	800 × 600 dots (SVGA)			—	●	●	—	●	—	—	—	—	—	—
	640 × 480 dots (VGA)			—	—	—	●	—	●	●	●	—	—	—
	320 × 240 dots (QVGA)			—	—	—	—	—	—	—	—	●	●	●
Built-in interface	RS-232 interface			●	●	●	●	●	●	●	●	●	●	●
	RS-422 interface			*3	*3	*3	*3	*3	*3	—	—	●	●	—
	RS-422/232 interface			●	●	●	●	●	●	●	●	●	●	●
	RS-422/485 interface			●	●	●	●	●	●	●	●	●	●	—
	Bus interface			—	—	—	—	—	—	—	—	—	●	—
	Ethernet interface			●	●	●	●	●	●	●	●	—	—	—
	USB interface: USB host			●	●	●	●	●	●	—	—	—	—	—
	USB device			●	●	●	●	●	●	●	●	●	●	●
	CF card interface			●	●	●	●	●	●	●	●	●	●	●
	Optional function board interface			●	●	●	●	●	●	●	●	●	●	●
	Extension unit interface			● 2ch	● 2ch	● 2ch	● 2ch	● 2ch	● 2ch	—	—	—	—	—
	Multimedia & Video/RGB interface			●	●	—	—	—	—	—	—	—	—	—
Others	Vertical display			—	—	—	—	—	—	●	●	●	●	●
	Clock function		(Battery)	●	●	●	●	●	●	●	●	●	●	●
	Buzzer output			●	●	●	●	●	●	●	●	●	●	●
	Human sensor			●	●	—	—	—	—	—	—	—	—	—
	Printer	Required	Printer unit	●	●	●	●	●	●	—	—	—	—	—
	CF card unit (CF card extension unit)	Required	CF card unit/CF card extension unit	—	●	●	●	●	●	—	—	—	—	—
	Sound output	Required	Sound output unit	●	●	●	●	●	●	—	—	—	—	—
	External input/output	Required	External input/output unit	●	●	●	●	●	●	—	—	—	—	—
	Video input / RGB input / RGB output	Required	Video/RGB unit	●	●	—	—	—	—	—	—	—	—	—
	Backlight OFF detection function			●	●	●	●	●	●	●	●	●	●	●
	Protective structure			●	●	●	●	●	●	●	●	●	●	●
Main unit functions	Boot OS installation		(CF card/USB memory <GT16 only>)	●	●	●	●	●	●	●	●	●	●	●
	Start from CF card		CF card	●	●	●	●	●	●	●	●	—	—	—
	OS installation		(CF card/USB memory <GT16 only>)	●	●	●	●	●	●	●	●	●	●	●
	Project data download/upload			●	●	●	●	●	●	●	●	●	●	●
	Resource data upload			●	●	●	●	●	●	●	●	●	●	●
	FA transparent function			●	●	●	●	●	●	●	●	●	●	●*4
	Multi-channel function			Up to 4ch	Up to 4ch	Up to 4ch	Up to 4ch	Up to 4ch	Up to 4ch	Up to 2ch	Up to 2ch	—	—	—
	Gateway function	Required	(CF card)	●	●	●	●	●	●	*7	*7	—	—	—
	Multi-drop connection			Coming soon	Coming soon	Coming soon	Coming soon	Coming soon	Coming soon	Coming soon	Coming soon	Serial only	Serial only	Serial only
	Modem connection			●	●	●	●	●	●	●	●	●	●	●
Screen design — Specifications	Base screen			●	●	●	●	●	●	●	●	●	●	●
	Superimposed window display			●	●	●	●	●	●	●	●	●	●	●
	Overlap window display			●	●	●	●	●	●	●	●	●	●	●
	Dialog window display			●	●	●	●	●	●	●	●	—	—	—
Supported image data format	BMP image display			●	●	●	●	●	●	●	●	—	—	—
	JPEG image display			●	●	●	●	●	●	●	●	—	—	—
	DXF data			●	●	●	●	●	●	●	●	—	—	—
	IGES data			●	●	●	●	●	●	●	●	—	—	—
Standard fonts (basic)	Japanese, Japanese (supporting European languages), Chinese (Simplified), Chinese (Simplified, supporting European languages), Chinese (Traditional, supporting European languages)			●	●	●	●	●	●	●	●	●	●	●
Standard fonts (optional)	Chinese (Simplified)	Required		●	●	●	●	●	●	—	—	—	—	—
	Chinese (Traditional)	Required		●	●	●	●	●	●	—	—	—	—	—
	Japanese	Required		●	●	●	●	●	●	—	—	—	—	—
	High-quality font			●	●	●	●	●	●	●	●	●	●	●
	TrueType font			●	●	●	●	●	●	●	●	●	●	●
	TrueType font (7 segments)			●	●	●	●	●	●	●	●	●	●	●
	Windows® font			●	●	●	●	●	●	●	●	●	●	●
	Stroke basic font (extended)	Required		●	●	●	●	●	●	●	●	●	●	●
	Stroke font (optional)	Required		●	●	●	●	●	●	—	—	—	—	—
	Logo character			●	●	●	●	●	●	●	●	●	●	●

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Category	Function *1	Extended/optional function OS installation	Other required devices	GT1695M-XTB□ XGA 15"	GT1685M-STB□ SVGA 12.1"	GT1675M-STB□ SVGA 10.4"	GT1675M-VTB□ VGA 10.4"	GT1665M-STB□ SVGA 8.4"	GT1665M-VTB□ VGA 8.4"	GT1275-VNBA VGA 10.4"	GT1265-VNBA VGA 8.4"	GT115□-Q□BD QVGA 5.7"	GT115□-Q□BD□ QVGA 5.7"	GT115□-HS-Q□BD QVGA 5.7"
Screen design — Common settings	Parts (object + figure) layer function			●	●	●	●	●	●	●	●	●	●	●
	Screen switching			●	●	●	●	●	●	●	●	●	●	●
	Station No. switching			●	●	●	●	●	●	●	●	●	●	●
	Multilingual support function			●	●	●	●	●	●	●	●	—	—	—
	Password			●	●	●	●	●	●	●	●	●	●	●
	System information			●	●	●	●	●	●	●	●	●	●	●
	Connected device setting			●	●	●	●	●	●	●	●	●	●	●
	Boot logo			●	●	●	●	●	●	●	●	●	●	●
	Comment registration			●	●	●	●	●	●	●	●	●	●	●
	Parts registration			●	●	●	●	●	●	●	●	●	●	●
	Data operation function			●	●	●	●	●	●	●	●	●	●	●
	Offset function			●	●	●	●	●	●	●	●	●	●	●
Security function	Security level authentication			●	●	●	●	●	●	●	●	●	●	●
	Operator authentication	Required	(Fingerprint auth. unit *6 CF card/USB memory <GT16 only>)	●	●	●	●	●	●	●	●	—	—	—
Object settings	Lamp display			●	●	●	●	●	●	●	●	●	●	●
	Touch switch			●	●	●	●	●	●	●	●	●	●	●
	Numeric display/input			●	●	●	●	●	●	●	●	●	●	●
	Data list display			●	●	●	●	●	●	●	●	●	●	●
	ASCII display/input			●	●	●	●	●	●	●	●	●	●	●
	Clock display			●	●	●	●	●	●	●	●	●	●	●
	Comment display			●	●	●	●	●	●	●	●	●	●	●
	Extended alarm monitoring/display		(CF card)	●	●	●	●	●	●	●	●	—	—	—
	Alarm list display			●	●	●	●	●	●	●	●	●	●	●
	Alarm history display		(CF card)	●	●	●	●	●	●	●	●	●	●	●
	Floating alarm display			—	—	—	—	—	—	—	—	—	—	—
	Parts display		(CF card)	●	●	●	●	●	●	●	●	●	●	●
	Parts movement		(CF card)	●	●	●	●	●	●	●	●	●	●	●
	Panel meter display			●	●	●	●	●	●	●	●	●	●	●
	Level display			●	●	●	●	●	●	●	●	●	●	●
	Trend graph			●	●	●	●	●	●	●	●	●	●	●
	Historical trend graph *5	Required *5	(CF card)	●	●	●	●	●	●	●	●	—	—	—
	Line graph			●	●	●	●	●	●	●	●	●	●	●
	Bar graph			●	●	●	●	●	●	●	●	●	●	●
	Statistical graph			●	●	●	●	●	●	●	●	●	●	●
	Scatter graph			●	●	●	●	●	●	●	●	●	●	●
	Status observation function			●	●	●	●	●	●	●	●	●	●	●
	Advanced recipe function	Required	(CF card)	●	●	●	●	●	●	●	●	—	—	—
	Recipe function	Required	(CF card)	●	●	●	●	●	●	●	●	●	●	●
	Time action function			●	●	●	●	●	●	●	●	●	●	●
Others	Report function	Required	Printer unit CF card	●	●	●	●	●	●	●	●	—	—	—
	Hardcopy function: File saving in CF card		CF card	●	●	●	●	●	●	●	●	●	●	●
	Printing on printer	Required	Printer unit	●	●	●	●	●	●	●	●	—	—	—
	Barcode function	Required		●	●	●	●	●	●	●	●	●	●	●
	RFID function	Required		●	●	●	●	●	●	●	●	●	●	●
	Multimedia function	Required	Multimedia unit, CF card	●	●	—	—	—	—	—	—	—	—	—
	Remote personal computer function	Required	Video/RGB input unit	●	●	—	—	—	—	—	—	—	—	—
	Sound output function	Required	Sound output unit	●	●	●	●	●	●	—	—	—	—	—
	External input/output function	Required	External input/output unit	●	●	●	●	●	●	—	—	—	—	—
	Operation panel function	Required	External input/output unit	●	●	●	●	●	●	—	—	—	—	—
	Screen call function			●	●	●	●	●	●	●	●	●	●	●
	Operation log function	Required	CF card	●	●	●	●	●	●	●	●	—	—	—
	Document display function	Required	CF card	●	●	●	●	●	●	●	●	—	—	—
	Logging function	Required	(CF card)	●	●	●	●	●	●	●	●	●	●	●
	Script function: Project script			●	●	●	●	●	●	●	●	●	●	●
	Screen script			●	●	●	●	●	●	●	●	●	●	●
	Object script	Required		●	●	●	●	●	●	●	●	●	●	●
	Device data transfer function	Required		●	●	●	●	●	●	●	●	●	●	●
Maintenance functions	System monitor function	Required		●	●	●	●	●	●	●	●	●	●	●
	List editor for A	Required		●	●	●	●	●	●	●	●	●	GT115□-Q□BDA only ●	●
	List editor for FX	Required		●	●	●	●	●	●	●	●	●	●	●
	SFC monitor function	Required	CF card	●	●	●	●	●	●	●	●	—	—	—
	Ladder editor function	Required	CF card	●	●	●	●	●	●	●	●	—	—	—
	Ladder monitor function	Required	(CF card)	●	●	●	●	●	●	●	●	—	—	—
	Intelligent unit monitor function	Required		●	●	●	●	●	●	●	●	—	—	—
	Q motion monitor function	Required		●	●	●	●	●	●	●	●	—	—	—
	Servo amplifier monitor function	Required		●	●	●	●	●	●	●	●	—	—	—
	Network monitor function	Required		●	●	●	●	●	●	●	●	—	—	—
	CNC monitor function	Required		●	●	●	●	●	●	—	—	—	—	—
	CNC data input/output function	Required	(CF card/USB memory <GT16 only>)	●	●	●	●	●	●	—	—	—	—	—
	Backup/restoration function	Required	(CF card/USB memory <GT16 only>)	●	●	●	●	●	●	●	●	—	—	—
	Maintenance time notification		Battery	●	●	●	●	●	●	●	●	●	●	●

*1: Functions details, such as the number of settings and the data storage destination, vary depending on the model.
*2: Required options or optional units other than the optional function board are shown. Parenthesized devices will be required depending on conditions of use. For details, see "Notes for use, Selection of optional units and devices" (page 77).
*3: The RS-232 interface can be used as an RS-422 interface by connecting an RS-422 conversion unit.
*4: Hardware configuration restrictions apply.
*5: To use the historical trend graph, it is necessary to set up the logging function in advance. In addition, it is necessary to install the optional function OS (logging).
*6: Required only when using fingerprint authentication.
*7: Only the FTP function is supported.

7

General specifications

Item		Specification
Operating ambient temperature	Display	0 to 50°C
	Other than display	0 to 55°C
Storage ambient temperature		−20°C to 60°C
Operating ambient humidity		10 to 90% RH, no condensation
Storage ambient humidity		10 to 90% RH, no condensation

Item			Frequency	Acceleration	Half amplitude	Sweep count
Vibration resistance	Conforming to JIS B 3502 and IEC 61131-2	Under intermittent vibration	5 to 9 Hz	–	3.5 mm	10 times in each of X, Y and Z directions
			9 to 150 Hz	9.8 m/s²	–	
		Under continuous vibration	5 to 9 Hz	–	1.75 mm	–
			9 to 150 Hz	4.9 m/s²	–	

Item	Specification
Impact resistance	Conforming to JIS B 3502 and IEC 61131-2 (147 m/s², 3 times in each of X, Y and Z directions)
Operating atmosphere	No corrosive gas
Operating altitude*1	2,000 m or lower
Installation location	In control panel
Overvoltage category*2	Ⅱ or lower
Contamination level*3	2 or less
Cooling method	Self-cooling
Grounding	Class D grounding (100 Ω or less). Connect to panel if unable to ground.

*1: Do not operate or store the GOT unit in pressurized environments where the pressure exceeds the 0 m elevation atmospheric pressure, as this could result in abnormal operation.
*2: 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 2,500 V for devices with ratings up to 300 V.
*3: 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 sunlight or in an environment with excessively high temperature, dust, humidity or vibration.

Power supply specifications

Item	Specification
	GT1265/75-VNBA
Input power supply voltage	100 to 240 V AC (+10%, −15%)
Input frequency	50/60Hz ±5%
Input maximum voltampere	44 VA (at max. load)
Power consumption	18 W or less
With backlight off	15 W or less
Inrush current	40 A or less (4 ms, at max. load)
Permissive instantaneous failure time	Within 20 ms (100 V AC or more)
Noise resistance	Noise voltage 1,500 Vp-p, and noise width 1µs, by noise simulator with noise frequency 25 to 60 Hz
Withstand voltage	1,500 V AC for 1 minute between power supply terminals and ground
Insulation resistance	10 MΩ or higher with an insulation resistance tester (500 V DC between power supply terminals 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 and FV2-N3A
Tightening torque (terminal block's terminal screws)	0.5 to 0.8 [N·m]

Performance specifications

Item		Specification	
		GT1275-VNBA	GT1265-VNBA
Display*1	Type	TFT color LCD	
	Screen size	10.4"	8.4"
	Resolution	640 x 480 [dots]	
	Display size	211.2(W) x 158.4(H) [mm]	170.9(W) x 128.2(H) [mm]
	Number of displayed characters	16-dot standard font: 40 chars. x 30 lines (2-byte) 12-dot standard font: 53 chars. x 40 lines (2-byte)	
	Display colors	256 colors	
	View angle*2	Right/left: 45°, Up/down: 20°	
	Intensity	200 [cd/m²]	
	Intensity adjustment	4-step adjustment	
	Life	Approx. 52,000 hours (Operating ambient temperature: 25°C)	
Backlight		Cold-cathode fluorescent tube (replaceable), 1 CCFL light.	
	Life*3	50,000 hours or more	40,000 hours or more
		(Time for display intensity reaches 50% at operating ambient temperature of 25°C)	
Touch panel	Type	Analog resistive type	
	Key size	Min. 2 x 2 [dots] (per key)	
	No. of simultaneous touch points	Simultaneous touch prohibited*4 (1 point touch only)	
	Life	1,000,000 times or more (operating force 0.98 [N] or less)	
Memory*5	C drive	6 MB built-in flash memory (for saving project data and function OS)	
	Life (No. of writings)	100,000 times	
	Built-in SRAM	512KB	

Item		Specification	
		GT1275-VNBA	GT1265-VNBA
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)	
Built-in interface	RS-232	RS-232, 1 ch, Transmission speed: 115,200/57,600/38,400/19,200/9,600/4,800 bps, Connector shape: D-sub 9-pin (male), Application: communication with PLC and other FA devices, communication with personal computer*2	
	RS-422/485	RS-422/485, 1 ch, Transmission speed: 115,200/57,600/38,400/19,200/9,600/4,800 bps, Connector shape: D-sub 9-pin (female), Application: Communication with PLC and other FA devices	
	Ethernet	Data transmission system: 100BASE-TX, 1 ch, Connector shape: RJ-45 (modular connector), Application: communication with connected devices	
	USB	USB (Full Speed 12 Mbps), device 1 ch, Connector shape: 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	
Buzzer output		Single tone (tone length adjustable)	
Protective construction		JEM1030, Front: IP67f*6	
External dimensions		303(W) x 214(H) x 53(D)	241(W) x 190(H) x 58(D)
Panel cut dimensions		289(W) x 200(H) mm	227(W) x 176(H) mm
Weight (excluding mounting brackets)		2.3kg	1.7kg
Applicable software packages	Screen design software	GT Designer3 Version 1.01B or later*7	

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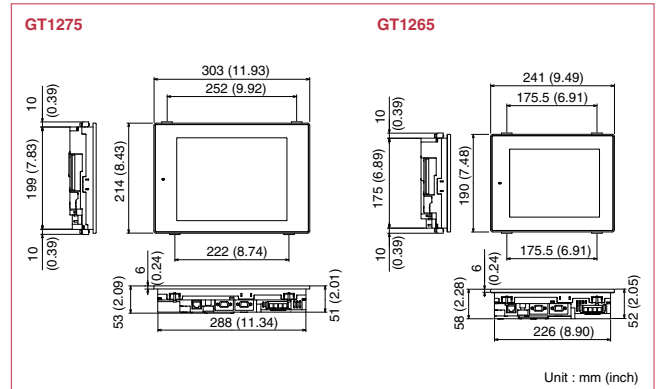*3: Using the GOT screen save/backlight OFF functions prevents screen burn-in and extends the backlight life.

*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: 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.
*7: iQ Works will be supported in the next version (except for GT12).

Component names

GT1275
GT1265

POWER LED — Display, touch panel
S.MODE (OS installation switch)
Battery holder — CF card interface
Dip switch for setting terminal resistance (inside cover) — CF card access LED / CF card access switch / USB interface
Ethernet interface — Power supply terminal
RS-422/485 interface — RS-232 interface

External dimensions

GT1275

303 (11.93)
252 (9.92)
10 (0.39)
199 (7.83)
214 (8.43)
10 (0.39)
222 (8.74)
6 (0.24)
53 (2.09)
288 (11.34)
51 (2.01)

GT1265

241 (9.49)
175.5 (6.91)
10 (0.39)
175 (6.89)
190 (7.48)
10 (0.39)
175.5 (6.91)
6 (0.24)
58 (2.28)
226 (8.90)
52 (2.05)

Unit : mm (inch)

Product lineup

	Model	Screen size [Resolution]	Display	Display color	Power supply	Memory capacity
GT12	GT1275-VNBA	10.4" VGA[640x480 dots]	TFT color LCD	256 colors	100 to 240 V AC	6MB
	GT1265-VNBA	8.4" VGA[640x480 dots]	TFT color LCD	256 colors	100 to 240 V AC	6MB

Options

Product name	Model	Specifications	
Battery	GT11-50BAT	Battery for backup of clock data, alarm history, and recipe data (for replacement)	
Protective sheet	GT11-70PSCB	Protective sheet for 10,4"	Clear, 5 sheets
	GT11-60PSCB	Protective sheet for 8,4"	
Backlight	GT12-70VLTN	Backlight for GT1275-VNBA	
	GT12-60VLTN	Backlight for GT1265-VNBA	

When exported from Japan, this manual does not require application to the Ministry of International Trade and Industry for service transaction permission.