MITSUBISHI

GT12

Supplementary Description

GT1275-VNBA, GT1275-VNBD
GT1265-VNBA, GT1265-VNBD

Thank you for purchasing the GOT1000 Series.

Prior to use, please read both this manual and the detailed manual thoroughly to fully understand the product.

MODEL	GT12-U-TUIKA- E
	SH(NA)-080864ENG-D(1104)MEE

GRAPHIC OPERATION TERMINAL
GOT1000

Manuals

The following shows manuals relevant to this product.

Relevant Manual

Manual name	Manual number (Model code)
GT16 User's Manual (Hardware) (Sold separately)*1	SH-080928ENG (1D7MD3)
GT16 User's Manual (Basic Utility) (Sold separately)*1	SH-080929ENG (1D7MD4)
GT11 User's Manual (Sold separately)*1	JY997D17501A (09R815)
GT Designer3 Version1 Screen Design Manual (Fundamentals) (Sold separately)*1	SH-080866ENG (1D7MB9)
GT Designer3 Version1 Screen Design Manual (Functions) 1/2, 2/2 (Sold separately)*1	SH-080867ENG (1D7MC1)
GOT1000 Series Connection Manual (Mitsubishi Products) for GT Works3 (Sold separately)*1	SH-080868ENG (1D7MC2)
GOT1000 Series Connection Manual (Non-Mitsubishi Products 1) for GT Works3 (Sold separately)*1	SH-080869ENG (1D7MC3)
GOT1000 Series Connection Manual (Non-Mitsubishi Products 2) for GT Works3 (Sold separately)*1	SH-080870ENG (1D7MC4)
GOT1000 Series Connection Manual (Microcomputer, MODBUS Products, Peripherals) for GT Works3 (Sold separately)*1	SH-080871ENG (1D7MC5)
GOT1000 Series Gateway Functions Manual for GT Works3 (Sold separately)*1	SH-080858ENG (1D7MA7)
GT Simulator3 Version1 Operating Manual for GT Works3 (Sold separately)*1	SH-080861ENG (1D7MB1)
GOT1000 Series User's Manual (Extended Functions, Option Functions) for GT Works3 (Sold separately)*1	SH-080863ENG (1D7MB3)
GT12 General Description (Included with GOT)	IB-0800448ENG (1D7MB4)

*1 It is stored as a PDF on the GT Works3 CD-ROM.

1. OVERVIEW

This manual is a supplementary description concerning the different functions between GT1275-VNBA, GT1275-VNBD, GT1265-VNBA, GT1265-VNBD (abbreviated as GT12 below) and GT1155-QSBD, GT1155-QLBD (abbreviated as GT11 below).
For details of the installation method, wiring method, and utility function, refer to description of the GT16 and the GT11 in each manual.

The GT12 model only has the standard functions available.
The following shows defferences between the GT11 and the GT12.
(For details of the differences, refer to 2. SPECIFICATION FUNCTION COMPARISON FOR GT12 AND GT11.)

(1) Using the analog touch panel
You can improve operability by using the analog touch panel.

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

(3) 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.

(4) 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.

(5) USB interface
The USB interface is on the rear side.

(6) CF card interface
The CF card interface is on the rear side.

(7) Ethernet interface
The Ethernet interface is on the rear side.

2. 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.

○ : Supported × : Not supported -: Not necessary

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℃)				Approx. 50,000 h (Operating ambient temperature: 25℃)		
Backlight	Life	Approx. 50,000 h or longer(Time when display luminance reaches 50% at the operating ambient temperature of 25℃)		Approx. 40,000 h or longer(Time when display luminance reaches 50% at the operating ambient temperature of 25℃)		Approx. 75,000 h or longer	Approx. 54,000 h or longer	
Touch panel	Type	Analog resistive film				Matrix resistive film		GT16 User's Manual (Hardware) GT11 User's Manual
	Number of touch keys	-				300 keys/screen (Matrix structure of 15 lines × 20 columns)		
	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
Built-in interface	USB (device)	○ (Rear side)				× (Front side)		
	Option function board	Option functions supported as standard				Option function board is necessary for option function use		
	Ethernet	○				×		GT16 User's Manual (Hardware)

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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) GT11 User's Manual
Backlight		GT12-70VLTN	GT12-60VLTN	Replacement unavailable	

*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	○	○	Screen Design Manual (Functions)
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 GT1275-VNBA, GT1275-VNBD, GT1265-VNBA, GT1265-VNBD	GT11 GT1155-QSBD, GT1155-QLBD	Relevant manual
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		○	○	
RFID function		○	○	
Hard copy function*2		○	×	
	Hard copy file storage location	A drive	-	
	Maximum number of files	100		
FA transparent function		○	×	GT16 User's Manual
GOT maintenance function	GOT start time	○	×	
Multi-channel function		○ (Maximum 2 ch.)	×	
FTP server function		○	×	Gateway Functions Manual
System monitoring function		○	×	GOT1000 Series User's Manual (Extended Functions, Option Functions)
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	GOT type	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	GOT type	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)

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U.S.A	Mitsubishi Electric Automation Inc. 500 Corporate Woods Parkway Vernon Hills, IL 60061, U.S.A. Tel : +1-847-478-2100
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