GT21 Series

GT21 Base Units

Model Number	Screen Size	Resolution	Display Type	Frame Color	Power Supply	Stocked Item
GT2103-PMBD						S
GT2103-PMBDS	3.8"	320 x 128 dots	TFT monochrome LCD		24VDC	S
GT2103-PMBDS2						S
GT2103-PMBLS				Black	5VDC	S
GT2104-RTBD	4.3"	480 x 272 dots	TFT color LCD			S
GT2105-QTBDS	5.7"	320 x 240 dots	TFT color LCD		24VDC	S
GT2105-QMBDS			TFT monochrome LCD			S
GT2107-WTBD	7.0"	800 x 480 dots	TFT color LCD display		24VDC	S
GT2107-WTSD				Silver		S

GT21 Power Supply Specifications

Model Number		GT2103-PMBD	GT2103-PMBDS	GT2103-PMBDS2	GT2103-PMBLS
Input Power Supply Voltage		24VDC (+10%, -15%)			5 VDC (±5%), supplied from PLC
Input Power Supply Frequency		-			
Power Consumption	Maximum Load	2.6W or less	1.9W or less	2.2W or less	1.1W or less
	Stand Alone with Backlight Off	2.0W	1.3W	1.6W	0.7W
Inrush Current		30A or less (1ms, ambient temperature 25°C, maximum load)			-
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		500VDC across power supply terminals and earth, 10MΩ or more by an insulation resistance tester			-

Model Number		GT2104-RTBD	GT2105-QTBDS	GT2105-QMBDS	GT2107-WTBD	GT2107-WTSD
Input Power Supply Voltage		24VDC (+10%, -15%)				
Input Power Supply Frequency		-				
Power Consumption	Maximum Load	4.4W or less	4.5W or less	2.9W or less	11.3W or less	
	Stand Alone with Backlight Off	2.9W	2.2W or less		7.0W	
Inrush Current		18 A or less (2 ms, 25°C, at the maximum load)	27A or less (2ms, 25°C, at the maximum load)		35 A or less (3 ms, ambient temperature: 25°C, under the maximum load)	
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		500VDC across power supply terminals and earth, 10MΩ or more by an insulation resistance tester	10MΩ or more by insulation resistance tester		500VDC across power supply terminals and earth, 10MΩ or more by an insulation resistance tester	

GT21 Performance Specifications

Model Number		GT2107-WTBD	GT2107-WTSD	GT2105-QTBDS	GT2105-QMBDS
Display Section (*1, *2)	Type	TFT color LCD		TFT Color LCD	TFT monochrome LCD
	Screen Size	7" widescreen		5.7"	
	Resolution (Dots)	WVGA: 800 x 480 dots		320 x 240 dots	
	Display Size (W x H) mm	152.4 x 91.44 (6.00 x 3.60 inch)		115 x 86 (4.53 x 3.39 inch)	
	Number of Characters	16-dot standard font: 50 chars x 30 lines (two-byte characters) 12-dot standard font: 66 chars x 40 lines (two-byte characters)		16-dot standard font: 20 chars x 15 lines (2-byte characters) 12-dot standard font: 26 chars x 20 lines (2-byte characters)	
	Display Colors	65536 colors		65536 colors	Monochrome (black/white) 32 shade grayscale
	Intensity Adjustment	32-level adjustment			
Backlight	Type	LED (Not replaceable)			
	Life (*4)	Approx. 50000 h (operating ambient temp: 25°C, display intensity: 50%)		Approx. 65000 h (operating ambient temp: 25°C, display intensity: 50%)	
Touch Panel (*3)	Type	Analog resistive film			
	Key Size (Dots)	Minimum 2 x 2 dots (per key) (*7)			
	Simultaneous Press	Simultaneous press prohibited (only 1 point can be pressed) (*5)			
	Life	1 million times or more (operating force 0.98N or less)			
Panel Color		Black	Silver	Black	
Memory	User Memory Capacity	Memory for storage (ROM): 15 MB		Memory for storage (ROM): 9 MB	
	Life (No. of Writings)	100000 times			
Battery	Type	GT11-50BAT lithium battery		-	
	Life	Approx. 5 years (ambient temp: 25°C)		-	
Built-in Interface	RS-232	1 channel Transmission speed: 115200, 57600, 38400, 19200, 9600, 4800 bps Connector shape: D-sub 9-pin (male)		1 channel Transmission speed: 115200, 57600, 38400, 19200, 9600, 4800 bps. Connector shape: D-sub 9-pin (male)	
	RS-422/485	1 channel Transmission speed: 115200, 57600, 38400, 19200, 9600, 4800 bps Connector shape: D-sub 9-pin (female)		1 channel Transmission speed: 115200, 57600, 38400, 19200, 9600, 4800 bps Connector shape: D-sub 9-pin (female) Terminating resistor (*9): OPEN/110 Ω/330 Ω (Switched with the terminating resistor setting switch)	
	RS-422	-		-	
	Ethernet	1 channel Data transfer method: 10BASE-T, 100BASE-TX Connector shape: RJ-45 (modular jack)		-	
	USB (Host)	1 channel (rear face) Maximum transfer rate: Full-Speed 12 Mbps Connector shape: USB-A			
	USB (Device)	1 channel (front face) Maximum transfer rate: Full-Speed 12 Mbps Connector shape: USB Mini-B		1 channel; Maximum transfer rate: Full-Speed 12 Mbps Connector shape: USB Mini-B	
	SD Card	1 channel, SDHC compliant (maximum 32 GB)			
Buzzer Output		Single tone (tone length adjustable)			
Protective Construction		Front: IP67F (*6, *8, *10) Inside control panel: IP2X		Outside the enclosure: IP67F (*6, *8) Inside the enclosure: IP2X	
External Dimensions (W x H x D) mm (in)		189 x 142 x 48 (7.44 x 5.59 x 1.89)		164 x 135 x 55 (6.46 x 5.32 x 2.17)	
Panel Cutout (W x H) mm (in)		180.5 x 133.5 (7.11 x 5.26)		153 x 121 (6.03 x 4.77)	
Weight kg (lb) (Excluding Mounting Brackets)		0.7 (1.54)		Approx. 0.7kg	
Applicable Software Package		GT Works3 Version1.170C or later		GT Works3 Version1.144A or later	

Notes:
1. Due to characteristics of LCD panels, bright dots (always lit) and dark dots (never lit) may appear on the panel. Note that these phenomena are characteristics of LCD panels and does not mean the products are defective or damaged.
2. Flickering may occur due to vibration, shock, or the display colors.
3. When a stylus is used, the touch panel has a life of 100 thousand touches. The stylus must satisfy the following specifications: • Material: polyacetal resin • Tip radius: 0.8 mm or more
4. To prevent the display section from burning in and lengthen the backlight life, enable the screen save function and turn off the backlight.
5. If you touch two points or more simultaneously on the touch panel, a touch switch near the touched points may operate unexpectedly. Do not touch two points or more simultaneously on the touch panel.
6. Note that the structure does not guarantee protection in all users' environments. The GOT may not be used in certain environments where it is subjected to splashing oil or chemicals for a long period of time or soaked in oil mist.
7. The minimum size of a key that can be arranged. To ensure safe use of the product, the following settings are recommended: • Key size: 16 x 16 dots or larger
8. The suffix "F" of IP67F is a symbol that indicates protection rate against oil. It is described in the Appendix of Japanese Industrial Standard JIS C 0920.
9. Set the terminating resistor selector switch of the GOT in accordance with the connection type when adopting GOT multidrop connection.
10. To conform to IP67F, close the USB environmental protection cover by pushing the [PULL] mark firmly. (The GOT conforms to IP2X when the USB environmental protection cover is open.)

GT21 Performance Specifications (continued)

Model Number		GT2104-RTBD	GT2103-PMBD	GT2103-PMBDS	GT2103-PMBDS2	GT2103-PMBLS
Display Section (*1, *2)	Type	TFT Color LCD	TFT monochrome LCD			
	Screen Size	4.3" widescreen	3.8"			
	Resolution (Dots)	480 x 272 dots	320 x 128 dots			
	Display Size (W x H) mm	95.0 x 53.8 (3.74 x 2.12 inch)	89.0 x 35.6 (3.51 x 1.41 inch)			
	Number of Characters	16-dot standard font: 30 char. x 17 lines (2-byte characters) /12-dot standard font: 40 char. x 22 lines (2-byte characters)	16-dot standard font: 20 chars. x 8 lines (2-byte) 12-dot standard font: 26 chars. x 10 lines (2-byte)			
	Display Colors	65536 colors	Monochrome (black/white) 32 shade grayscale			
	Intensity Adjustment	32-level adjustment				
Backlight	Type	LED (Not replaceable)	5-color LED (white/green/pink/orange/red) (not replaceable)			
	Life (*4)	Approx. 50000 hours (Time for display intensity reaches 50% at ambient temperature of 25°C)				
Touch Panel (*3)	Type	Analog resistive film				
	Key Size (Dots)	Minimum 2 x 2 dots (per key) (*9)				
	Simultaneous Press	Simultaneous press prohibited (only 1 point can be pressed) (*5)				
	Life	1 million times or more (operating force 0.98N or less)				
Panel Color		Black				
Memory	User Memory Capacity	Memory for storage (ROM): 9 MB	Memory for storage (ROM): 3MB			
	Life (No. of Writings)	100000 times				
Battery	Type	GT11-50BAT lithium battery				
	Life	Approx. 5 years (ambient temp: 25 °C)				
Built-in Interface	RS-232	1 channel Transmission speed: 115200, 57600, 38400, 19200, 9600, 4800 bps Connector shape: 9-pin connector terminal block	-	1 channel Transmission speed: 115200, 57600, 38400, 19200, 9600, 4800 bps Connector shape: MINI-DIN 6-pin (female)	2 channels Transmission speed: 115200, 57600, 38400, 19200, 9600, 4800 bps Connector shape: 9-pin connector terminal block, MINI-DIN 6-pin (female)	-
	RS-422/485	1 channel Transmission speed: 115200, 57600, 38400, 19200, 9600, 4800 bps Connector shape: 9-pin connector terminal block	1 channel Transmission speed: 115200, 57600, 38400, 19200, 9600, 4800 bps Connector shape: 5-pin connector terminal block	1 channel Transmission speed: 115200, 57600, 38400, 19200, 9600, 4800 bps Connector shape: 9-pin connector terminal block	-	-
	RS-422	-				1 channel Transmission speed: 115200, 57600, 38400, 19200, 9600, 4800 bps Connector shape: 9-pin connector terminal block
	Ethernet	1 channel Data transfer method: 10BASE-T, 100BASE-TX Connector shape: RJ-45 (modular jack)	-			
	USB (Host)	1 channel (rear face) Maximum transfer rate: Full-Speed 12 Mbps Connector shape: USB-A				
	USB (Device)	1 channel (front face) Maximum transfer rate: Full-Speed 12 Mbps Connector shape: USB Mini-B				
	SD Card	1 channel, SDHC compliant (maximum 32 GB)	1 channel, SDHC compliant (maximum 32 GB) (*6)			-
Buzzer Output		Single tone (tone length adjustable)				
Protective Construction		Front: IP67F Inside control panel: IP2X (*7, *10)				
External Dimensions (W x H x D) mm (in)		128 x 102 x 40 (5.04 x 4.02 x 1.57)	113 x 74 x 32 (4.45 x 2.91 x 1.26)	113 x 74 x 27 (4.45 x 2.91 x 1.06) (*8)		113 x 74 x 27 (4.45 x 2.91 x 1.06)
Panel Cutout (W x H) mm (in)		118 x 92 (4.65 x 3.62)	105 x 66 (4.1 x 2.60)			
Weight kg (lb) (Excluding Mounting Brackets)		0.4 (0.88)	0.2 (0.44)			0.18 (0.40)
Applicable Software Package		GT Works3 Version1.122C or later	GT Works3 Version1.112S or later		GT Works3 Version1.119Z or later	

Notes:
1. Due to characteristics of LCD panels, bright dots (always lit) and dark dots (never lit) may appear on the panel. Note that these phenomena are characteristics of LCD panels and does not mean the products are defective or damaged.
2. Flickering may occur due to vibration, shock, or the display colors.
3. When a stylus is used, the touch panel has a life of 100 thousand touches. The stylus must satisfy the following specifications: • Material: polyacetal resin • Tip radius: 0.8 mm or more
4. To prevent the display section from burning in and lengthen the backlight life, enable the screen save function and turn off the backlight.
5. If you touch two points or more simultaneously on the touch panel, a touch switch near the touched points may operate unexpectedly. Do not touch two points or more simultaneously on the touch panel.
6. The SD memory card unit (GT21-03SDCD), sold separately, needs to be mounted.
7. Note that the structure does not guarantee protection in all users' environments. The GOT may not be used in certain environments where it is subjected to splashing oil or chemicals for a long period of time or soaked in oil mist.
8. The dimension when the SD memory card unit (GT21-03SDCD) is mounted is (W x H x D) mm (inch) 113 x 74 x 32 (4.45 x 2.91 x 1.26).
9. The minimum size of a key that can be arranged. To ensure safe use of the product, the following settings are recommended: • Key size: 16 x 16 dots or larger
10. The suffix "F" of IP67F is a symbol that indicates protection rate against oil. It is described in the Appendix of Japanese Industrial Standard JIS C 0920.

GT21 Panel Cut Dimensions

Screen Size	Model	A	B	Remarks
3.8"	GT2103	105 (4.14)	66 (2.60)	Same dimensions as GT1020
4.3"	GT2104	118 (4.65)	92 (3.63)	
5.7"	GT2105	153 (6.03)	121 (4.77)	Same dimensions as GT1055-Q and GT1050-Q
7.0"	GT2107	180.5 (7.11)	133.5 (5.26)	

A $^{+1\ (0.04)}_{0\ (0)}$

Panel opening

B $^{+1\ (0.04)}_{0\ (0)}$

(unit: mm)