

GT23 Model

GOT2000 Overview

GT2715-X T B A S

Code	Screen Size	Code	Resolution	Code	Display Type	Code	Frame Color	Code	Power Supply	Code	Communication Interface
15	15"	WX	WXGA	T	TFT Color	B	Black	A	100-240VAC	None (*1)	Ethernet, RS-422/485, or RS-232, depending on model
12	12.1"	X	XGA	M	TFT monochrome	W	White	D	24VDC	S1 (*1)	RS-232 and RS-422/485 interfaces, or RS-422 interface only
12F	12.1" Open Frame	S	SVGA			S	Silver	L	5VDC	S2 (*1)	Two RS-232 interfaces
10	10.4" or 10.1"	V	VGA			N	No Frame			-GF (*2)	CC-Link IE Field Network communication unit set
10F	10.4" Open Frame	P	320 x 128 dots								
08	8.4"	R	480 x 272 dots								
08F	8.4" Open Frame	Q	320 x 240 dots								
07	7.0"	W	Wide screen WVGA 800 x 480 dots								
05	5.7"										
04	4.3"										
03	3.8"										

*1: GT21 only.
*2: For GT27/GT25 only

GT27	Advanced model with multi-touch gesture functions
GT25	High performance, cost efficient, mid-range model (open frame available)
GT23	Unchallenged cost performance
GT21	Compact models with basic functions

GOT2000 Series General Specifications

Model Number	GT27, GT25, GT23	GT21				
Operating Ambient Temp. (*1)	0 to 55°C (*2)	0 to 55°C (horizontal installation), 0 to 50°C (vertical installation)				
Storage Ambient Temperature	-20°C to 60°C					
Operating Ambient Humidity	10 to 90%RH, no condensation	10 to 90%RH, no condensation (*2)				
Storage Ambient Humidity	10 to 90%RH, no condensation (*2)					
Vibration Resistance	Conforming to JIS B 3502 and IEC 61131-2	Frequency	Acceleration	Half Amplitude	Sweep Count	
		Under intermittent vibration	5 to 8.4Hz 8.4 to 150Hz	- 9.8m/s ²	3.5mm -	10 times each in X, Y and Z directions
		Under continuous vibration	5 to 8.4Hz 8.4 to 150Hz	- 4.9m/s ²	1.75mm -	
Impact Resistance	Compliant with JIS B 3502, IEC 61131-2 (147 m/s ² (15G), 3 times each in X, Y and Z directions)					
Operating Atmosphere (*6)	No greasy fumes, corrosive gas, flammable gas, excessive conductive dust, and direct sunlight (as well as at storage)					
Operating Altitude (*3)	2000m (6562 ft) or less					
Installation Location	Inside control panel					
Overvoltage Category (*4)	II or less					
Pollution Degree (*5)	2 or less					
Cooling Method	Self-cooling					
Grounding	Grounding with a ground resistance of 100Ω or less. If impossible, connect the ground cable to the control panel.		Grounding with a ground resistance of 100Ω or less by using a ground cable that has a cross-sectional area of 0.14 to 1.5 mm ² (single wire), 0.14 to 1.0 mm ² (stranded wire), or 0.25 to 0.5 mm ² (rod terminal with an insulation sleeve). If impossible, connect the ground cable to the control panel. (*7)			

- Notes:**
- The operating ambient temperature includes the temperature inside the enclosure of the control panel to which the GOT is installed.
 - (GT27, GT25) When any of the following units is mounted, the maximum operating ambient temperature must be 5 °C lower than the one described in the general specifications: multimedia unit (GT27-MMR-Z), MELSECNET/H communication unit (GT15-J71LP23-25, GT15-J71BR13), CC-Link communication unit (GT15-J61BT13)
 - (GT23, GT21) If the ambient temperature exceeds 40°C, the absolute humidity must not exceed 90% RH at 40 °C.
 - Do not use or store the GOT under a pressure higher than the atmospheric pressure at altitude 0 m. Doing so may cause a malfunction. Air purging by applying pressure to the control panel may create clearance between the surface sheet and the touch panel. This may cause the touch panel to be not sensitive enough or the sheet to come off.
 - This indicates the section of the power supply to which the equipment is assumed to be connected between the public electrical power distribution network and the machinery within the premises. Category II applies to equipment that is supplied with power from fixed facilities. The withstand surge voltage for the equipment with the rated voltage up to 300 V is 2500 V.
 - This indicates the occurrence rate of conductive material in an environment where a device is used. Pollution degree 2 indicates an environment where only non-conductive pollution occurs normally and a temporary conductivity caused by condensation shall be expected depending on the conditions.
 - (GT25, GT27 only) Some models have ANSI/ISA 12.12.01 approval for use in Class I, Division 2 (ANSI/ISA 12.12.01, C22.2 No.213-M1987) hazardous locations. For the details, please contact your local sales office.
 - 5 VDC type does not require grounding.

GT23 Series

GT23 Base Units

Category	Model Number	Screen Size	Resolution	Display Type	Frame Color	Power Supply	Stk. Item
GT23	GT2310	GT2310-VTBA	10.4"	VGA (640 x 480)	TFT Color	100-240VAC	S
		GT2310-VTBD					24VDC
	GT2308	GT2308-VTBA	8.4"	VGA (640 x 480)		100-240VAC	S
		GT2308-VTBD					24VDC

GT23 Power Supply Specifications

Model Number	GT2310-VTBA	GT2308-VTBA	GT2310-VTBD	GT2308-VTBD
Input Power Supply Voltage	100 to 240VAC (+10%, -15%)		24VDC (+25%, -20%)	
Input Power Supply Frequency	50/60Hz ±5%		-	
Power Consumption	Maximum Load	18W or less	11W or less	16W or less
	Stand Alone	15W	9W	13W
	Stand Alone with Backlight Off	8W	6W	7W
Inrush Current	40A or less (4ms, ambient temperature 25°C, maximum load)		40A or less (2ms, ambient temperature 25°C, maximum load)	
Permissible Instantaneous Failure Time	Within 20ms (100VAC or more)		Within 10ms	
Noise Resistance	Noise voltage 1500Vp-p, noise width 1µs by noise simulator with noise frequency 25 to 60Hz		Noise voltage 500Vp-p, noise width 1µs by noise simulator with noise frequency 25 to 60Hz	
Withstand Voltage	1500VAC for 1 minute between power supply terminal and ground		350VAC for 1 minute between power supply terminal and ground	
Insulation Resistance	10MΩ or higher with an insulation resistance tester (500VDC between power supply terminal and ground)			
Applicable Wire Size	0.75 to 2 [mm ²]			
Clamp Terminal	Clamp terminals for M3 screw RAV1.25-3, V2-S3.3, V2-N3A, FV2-N3A			
Tightening Torque (Terminal Block's Terminal Screws)	0.5 to 0.8 [N·m]			

GT23 Performance Specifications

Model Number	GT2310-VTBA • GT2310-VTBD	GT2308-VTBA • GT2308-VTBD
Display Section (*1, *2)	Type	TFT color LCD
	Screen Size	10.4"
	Resolution (Dots)	640 x 480 VGA
	Display Size (W x H) mm	211.2 x 158.4
	Number of 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	65536 colors
Backlight	Intensity Adjustment	16-level adjustment
	Type	LED (not replaceable)
Touch Panel (*3)	Life (*4)	Approx. 50000 hours or more (Time for display intensity reaches 50% at ambient temperature of 25°C)
	Type	Analog resistive film
	Key Size (Dots)	Minimum 2 x 2 dots (per key) (*7)
Panel Color	Simultaneous Press	Not available (only 1 point can be pressed) (*5)
	Life	1 million times or more (operating force 0.98N or less)
Memory	User Memory Capacity	Black
	Life (No. of Writings)	Memory for storage (ROM): 9MB, Memory for operation (RAM): 9MB 100,000 times
Internal Clock Accuracy	±90 sec/month (ambient temperature 25°C)	
Battery	Type	GT11-50BAT lithium battery
	Life	Approx. 5 years (ambient temperature 25°C)
Built-in Interface	RS-232	1ch Transmission speed: 115200/57600/38400/19200/9600/4800bps Connector shape: D-sub 9-pin (male)
	RS-422/485	1ch Transmission speed: 115200/57600/38400/19200/9600/4800bps Connector shape: D-sub 9-pin (female)
	Ethernet	1ch Data transfer method: 10BASE-T/100BASE-TX Connector shape: RJ-45 (modular jack)
	USB (Host)	1ch Maximum transfer rate: Full-Speed 12 Mbps Connector shape: USB-A
	USB (Device)	1ch Maximum transfer rate: Full-Speed 12 Mbps Connector shape: USB Mini-B
	SD Card	1ch SDHC compliant (maximum 32GB)
Buzzer Output	Single tone (tone, tone length adjustable)	
Power LED	Emission color: 2 colors (blue, orange)	
Protective Construction	Front: IP67F (*6, *8) In control panel: IP2X	
External Dimensions (W x H x D) mm	303 x 218 x 56	241 x 194 x 56
Panel Cutout (W x H) mm	289 x 200	227 x 176
Weight (Excluding Mounting Brackets)	1.9 kg	1.5 kg
Applicable Software Package	GT Works3 Version1.100E or later	

Notes:

- As a characteristic of liquid crystal display panels, bright dots (always lit) and dark dots (never lit) may appear on the panel. Since liquid crystal display panels comprise a great number of display elements, the appearance of bright and dark dots cannot be reduced to zero. Individual differences in liquid crystal display panels may cause differences in color, uneven brightness and flickering. Note that these phenomena are characteristics of liquid crystal display panels and it does not mean the products are defective or damaged.
- Flickering may occur due to vibration, shock, or the display colors.
- 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
- To prevent the display section from burning in and lengthen the backlight life, enable the screen save function and turn off the backlight.
- 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.
- 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.
- 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 • Distance between keys: 16 dots or more
- 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.

GT23 Panel Cut Dimensions

Screen Size	Model	A	B	Remarks
10.4"	GT2310	289 (11.38)	200 (7.87)	Same dimensions as GT167M, GT157M, A97MGOT
8.4"	GT2308	227 (8.94)	176 (6.93)	Same dimensions as GT1665, GT1565

