

GTseries | Specifications

Item	GT01 / GT01R				GT05M / GT05G		GT05S		GT11		
	5V/RS232C	5V/RS422	24V/RS232C	24V/RS422	RS232C	RS422	RS232C	RS422	RS232C	RS422	
Rated voltage	5 V DC				24 V DC						
Operating voltage range	4.5 to 5.5 V DC				21.6 to 26.4 V DC						
Power consumption	1W max.	1.1W max.	2W max.		2.4W max.		3.6W max.		2.4W max.		
Power supply unit isolation method	—				Transformer isolation				—		
Ambient temperature	0 to 50°C								0 to 50°C*1		
Ambient humidity	20 to 85% RH (No condensation at 25°C)										
Storage temperature	-20 to 60°C										
Storage humidity	10 to 85% RH (No condensation at 25°C)										
Vibration resistance	10 to 55 Hz (1-minute cycle): Double amplitude: 0.75 mm, 10 minutes in each of the X, Y, and Z directions										
Shock resistance	98 m/s ² min: 4 times in each of the X, Y, and Z directions										
Superposed noise suppression	1,000 V [P-P] min, pulse width of 50 ns, 1 μs between power supply terminals (by a noise simulator) *AIGT0030B1/AIGT0030H1: When the ferrite device supplied with our PLC connection cable (AIGT8142) is mounted										
Environmental resistance	IP65 (in the initial stages) Dust-proof and drip-proof from the front of the panel only (Rubber packing is attached to the panel contact surface.) *When reattaching the panel, replace the waterproof packing.										
Mass	Approx. 160 g				Approx. 230 g						
Display	Display device	STN monochrome LCD				STN monochrome LCD		STN color LCD		STN monochrome LCD	
	Resolution	128 (W) x 64 (H) dots				320 (W) x 240 (H) dots		4,096 colors		240 (W) x 96 (H) dots	
	Display color	2 colors (black/white)				2 colors (black/white)		4,096 colors		2 colors (black/white)	
	Displayable area	70.38 (W) x 35.18 (H) mm				73.0 (W) x 55.2 (H) mm				96.0 (W) x 38.4 (H) mm	
	Backlight	GT01: 3-color LED (green, orange, red) GT01R: 3-color LED (white, pink, red) *No need for replacement				GT05M: 3-color LED (white, pink, red) GT05G: 3-color LED (green, orange, red) *No need for replacement		White LED *No need for replacement		3-color LED (green, orange, red)/White LED *No need for replacement	
Font types	Fixed (GTWIN) : 8 x 8, 16 x 8, and 16 x 16 dots Characters can be displayed in the 1, 2, 4, or 8 times width or height. TrueType (GTWIN) : 10 to 64 dots				Fixed (GTWIN) : 8 x 8, 16 x 8, and 16 x 16 dots, Characters can be displayed in the 1, 2, 4, or 8 times width or height, TrueType (GTWIN) : 10 to 240 dots, Windows®: 10 to 240 dots				Fixed (GTWIN) : 8 x 8, 16 x 8, and 16 x 16 dots Characters can be displayed in the 1, 2, 4, or 8 times width or height. TrueType (GTWIN) : 10 to 64 dots		
Languages	Japanese, English, Korean, German, French, Spanish, Italian, Simplified Chinese, Traditional Chinese, Turkish										
Graphics	Straight lines, continuous straight lines, squares, circles, ovals, arcs, elliptic arcs, fan shapes, elliptic fan shapes, beveled squares, bitmaps										
Number of screens*4	Approx. 160 screens				Approx. 240 screens		Approx. 180 screens		Approx. 250 screens		
Screen No. that can be set	Base screens: No. 0 to 3FF, Keyboard screens: No. 0 to 7										
Functions	Part functions	Messages, lamps, switches, data, bar graphs, clocks, keyboards, and line graphs				Messages, lamps, switches, data, bar graphs, clocks, keyboards, line graphs, and alarm list parts					
	Other functions	Recipe, flow display, write device, and language switching				Recipe, flow display, write device, alarm record, alarm list, and language switching					
	Clock function	Refers to and displays external clock data. (Not provided with a built-in clock function.)				Provided with a built-in clock function. (Can also refer to and display a PLC clock.) *Buy a commercially available battery.					
	Contrast adjustment	Contrast can be adjusted by using the touch panel.									
Automatic communication settings	The communication speed (baud rate) is automatically changed if there is no response from the target equipment.										
Debugging function	GT connected between a PC and PLC allows the PLC to be debugged without a direct connection with the PC.										
Screen creation	Dedicated software should be used. Applicable OS: Windows® 95 (OSR2 or later)/ 98/Me/2000/NT/XP/Vista				Dedicated software should be used. Applicable OS: Windows® 2000/XP/Vista				Dedicated software should be used. Applicable OS: Windows® 95 (OSR2 or later)/ 98/Me/2000/NT/XP/Vista		
Touch key resolution	Free layout (8 dots min.)										
Touch key operation force	0.5 N max.				0.8 N max.				0.5 N max.		
Touch key life	1 million operations min. (at 25°C)										
COM. Port	Communication standard	Conforms to RS232C	Conforms to RS422	Conforms to RS232C	Conforms to RS422	Conforms to RS232C	Conforms to RS422	Conforms to RS232C	Conforms to RS422	Conforms to RS232C	Conforms to RS422
	External communication conditions	Baud rate: 9,600/19,200/38,400/57,600/115,200 bps									
	Protocol	Data bits: 7 or 8 bits, Parity: None, Odd, Even, Stop bits: 1 bit									
	Connector	Our FP series supported/General-purpose serial interface supported/Other companies' PLC supported (Refer to the compatible PLC list for manufacturers and models.)									
Screen data transfer interface	Communication standard	Tool port (Conforms to RS232C)				USB1.1		Tool port (Conforms to RS232C)			
	Communication conditions with personal computers	Baud rate: 9,600/19,200/115,200/230,400 bps*6 Data bits: 8 bits, Parity: None, Odd, Even, Stop bits: 1 bit				—		Baud rate: 9,600/19,200/115,200/230,400 bps*6 Data bits: 8 bits, Parity: None, Odd, Even, Stop bits: 1 bit			
	Protocol	Our dedicated protocol									
	Connector	5-pin mini-DIN				USB TYPE-B		5-pin mini-DIN			
Ethernet port*8	—										
User's memory	F-ROM										
Memory capacity	384 kbyte				2 Mbyte		12 Mbyte		1.375 Mbyte		
Memory	SRAM										
Memory backup	—				Lithium battery (replaceable) AFPX-BATT *Does not come with product.				Lithium battery (replaceable) CR2032, commercially available *Does not come with product.		

Conformance to the UL/cUL standards

UL/cUL file No.	E96300
UL Standard No.	UL508

Item	GT21C		GT32M		GT32T0		GT32T1		
	RS232C	RS422	RS232C	RS422	RS232C	RS422	RS232C	RS422	
Rated voltage	24 V DC								
Operating voltage range	21.6 to 26.4 V DC								
Power consumption	4.8W max.		10W max.			12W max.			
Power supply unit isolation method	—		Transformer isolation						
Ambient temperature	0 to 50°C*2		0 to 50°C*3						
Ambient humidity	20 to 85% RH (No condensation at 25°C)								
Storage temperature	-20 to 60°C								
Storage humidity	10 to 85% RH (No condensation at 25°C)								
Vibration resistance	10 to 55 Hz (1-minute cycle): Double amplitude: 0.75 mm, 10 minutes in each of the X, Y, and Z directions								
Shock resistance	98 m/s ² min: 4 times in each of the X, Y, and Z directions								
Superposed noise suppression	1,000 V [P-P] min, pulse width of 50 ns, 1 μs between power supply terminals (by a noise simulator)								
Environmental resistance	IP65 (in the initial stages) Dust-proof and drip-proof from the front of the panel only (Rubber packing is attached to the panel contact surface.) *When reattaching the panel, replace the waterproof packing.								
Mass	Approx. 330 g		Approx. 500 g		Approx. 470 g		Approx. 480 g		
Display	Display device	STN color LCD		STN monochrome LCD		TFT color LCD			
	Resolution	320 (W) x 240 (H) dots							
	Display color	256 colors		2 colors (blue/white)		4,096 colors			
	Displayable area	98.0 (W) x 74.0 (H) mm		113.2 (W) x 86.4 (H) mm		110.8 (W) x 83.6 (H) mm			
	Backlight	White LED *No need for replacement		CFL *Not replaceable. Average life: GT32M: 75,000 hours (at 25°C), GT32T: 50,000 hours (at 25°C)					
Functions	Font types	Fixed (GTWIN) : 8 x 8, 16 x 8, and 16 x 16 dots. Characters can be displayed in the 1, 2, 4, or 8 times width or height. TrueType (GTWIN): 10 to 240 dots, Windows®: 10 to 240 dots							
	Languages	Japanese, English, Korean, German, French, Spanish, Italian, Simplified Chinese, Traditional Chinese, Turkish							
	Graphics	Straight lines, continuous straight lines, squares, circles, ovals, arcs, elliptic arcs, fan shapes, elliptic fan shapes, beveled squares, bitmaps							
	Number of screens**4	Approx. 250 screens		Approx. 240 screens		Approx. 180 screens			
	Screen No. that can be set	Base screens: No. 0 to 3FF, Keyboard screens: No. 0 to 7							
	Part functions	Messages, lamps, switches, data, bar graphs, clocks, keyboards, line graphs, and alarm list parts							
	Other functions	Recipe, flow display, write device, alarm record, alarm list, and language switching						Sound output *5	
	Clock function	Provided with a built-in clock function. (Can also refer to and display a PLC clock.) *Buy a commercially available battery.							
	Contrast adjustment	Contrast can be adjusted by using the touch panel.				Not adjustable			
	Automatic communication settings	The communication speed (baud rate) is automatically changed if there is no response from the target equipment.							
	Debugging function	GT connected between a PC and PLC allows the PLC to be debugged without a direct connection with the PC.							
	Screen creation	Dedicated software should be used. Applicable OS: Windows® 95 (OSR2 or later)/ 98/Me/2000/NT/XP/Vista			Dedicated software should be used. Applicable OS: Windows® 2000/XP/Vista				
	Touch key resolution	Free layout (8 dots min.)							
Touch key operation force	0.8 N max.								
Touch key life	1 million operations min. (at 25°C)								
COM. Port	Communication standard	Conforms to RS232C	Conforms to RS422	Conforms to RS232C	Conforms to RS422	Conforms to RS232C	Conforms to RS422	Conforms to RS232C	Conforms to RS422
	External communication conditions	Baud rate: 9,600/19,200/38,400/57,600/115,200 bps Data bits: 7 or 8 bits, Parity: None, Odd, Even, Stop bits: 1 bit							
	Protocol	Our FP series supported/General-purpose serial interface supported/Other companies' PLC supported (Refer to the compatible PLC list for manufacturers and models.)							
	Connector	Connector terminal base (8 pins)							
Screen data transfer interface	Communication standard	Tool port (Conforms to RS232C)			USB1.1				
	Communication conditions with personal computers	Baud rate: 9,600/19,200/115,200/230,400 bps*6 Data bits: 8 bits, Parity: None, Odd, Even, Stop bits: 1 bit			—				
	Protocol	Our dedicated protocol							
	Connector	5-pin mini-DIN			USB TYPE-B				
	Ethernet port*9	—			Yes (100BASE-TX, 10BASE-T) *7, *8				
User's memory	—				F-ROM				
Memory capacity	6.5 Mbyte		2 Mbyte		12 Mbyte (Ver.1.10 or later)				
Memory	SRAM								
Memory backup	Lithium battery (replaceable) CR2032, commercially available *Does not come with product.			Lithium battery (replaceable) AFPX-BATT *Does not come with product.					

*1. When the unit is being installed in a portrait orientation or FP programmer II is being connected to the TOOL port, the usable range is 0 to +45°C.
*2. When the unit is being installed in a horizontal orientation or FP programmer II is being connected to the TOOL port, the usable range is 0 to +45°C.
*3. When the unit is being installed in a horizontal orientation, the usable range is 0 to +40°C.
*4. The number of screens that can be registered varies according to the registered contents.
*5. WAV format (PCM, 8-KHz sampling rate, 16 bits, mono), Maximum sound data capacity: 512 KB (approx. 30 sec), Maximum registrable number of sound data items: 128

*6. A USB/RS232C conversion cable should be used to achieve a communication speed of 230,400 bps.
When the TOOL port of GT is set to 230,400 bps, the auto communication setting function of GTWIN cannot be used. Set the communication speed to 230,400 bps on GTWIN before transferring data.
*7. The unit carries out serial communication data processing at 115.2kbts/s.
*8. Communications with external equipment (PLC) are not available.
*9. Simultaneous USB and Ethernet communications are not possible.