



**GT series Legacy
Programmable Displays**

**Got questions? Contact Ramco Innovation today!
Toll Free USA - 800-328-6236
Email us- iainside@ramcoi.com**

GT03-E

Discontinuation plan
Type with SD memory card slot

Discontinuation plan
Type without SD memory card slot

Orders to end on September 30, 2024

Orders to end on September 30, 2025

Tough

Programmable Display

The smallest class body among 3.5 inch screen

Color display uses 3.1 W or less for low power consumption!

3.5 inch



Tough model

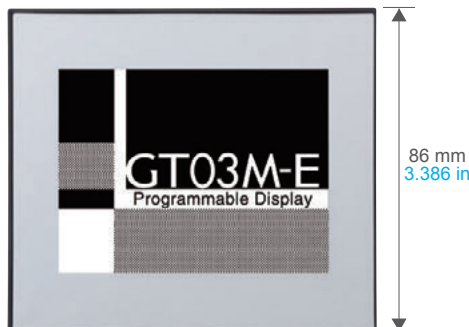
Silver



GT03T-E

GT03T-E

Silver



GT03M-E

98 mm
3.858 in

86 mm
3.386 in

3.5 inch, 4,096 colors TFT color LCD equipped with long life LED backlight

Built-in SD / SDHC memory card slot *1

Easy to copy, back up, and restore screen data.

*1: Class 10 compatible with a card of up to 32 GB.

GT03M-E

3.5 inch, 16-gray scale TFT monochrome LCD equipped with long life LED backlight

Through use of a TFT LCD with contrast ratio of 1,000 : 1, the "deep black" on a bright display means incredible visibility even in bright environments.

Common features

Superior visibility even in sunlight

The brightness and contrast ratio have been improved.

Wide range of operating temperature that covers outdoor use

The improved environmental resistance allows for use in a wider operating temperature range of -20 to +60 °C **-4 to +140 °F**.

UV resistant, anti-glare front panel

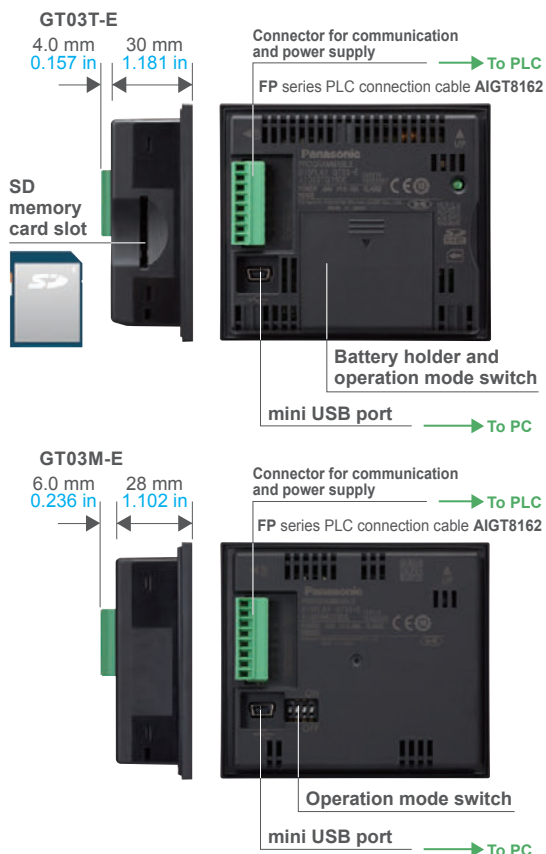
A front protection layer reduces the intensity of UV rays and has an anti-glare coating.

Impressive water resistance makes usage possible in areas prone to water contact.

The front panel is IP67 rated with added protection applied to the rear of the unit for a more rugged overall construction.

Integrated USB Interface

You can connect your PC and **GT03-E** using your USB cable to transfer screen data. When used with our **FP** series PLC, this display supports the pass through function, which allows simultaneous debugging of the PLC and the display.



3.5 inch	TFT monochrome (white / black)	TFT 4,096 colors	White LED	32 chars. x 24 lines (10-dot font)	320 x 240 dots	mini USB	SD HC	Portrait	IP67	24 V DC
- GT03M-E	- GT03T-E					- GT03T-E				

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GT32-E

Discontinuation plan

Orders to end on September 30, 2024

Tough

Programmable Display

Outdoor use made possible by significantly improved environmental resistance and visibility

5.7 inch



Tough model

Silver



GT32T-E

GT32T-E

5.7 inch, 4,096 colors TFT color LCD equipped with long life LED backlight

Great visibility even in bright environments is possible thanks to use of a TFT LCD with contrast ratio of 500 : 1.

GT32M-E

5.7 inch, 16-gray scale TFT monochrome LCD equipped with long life LED backlight

Through use of a TFT LCD with contrast ratio of 400 : 1, the "deep black" on a bright display means incredible visibility even in bright environments.

Common features

Superior visibility even in sunlight

The brightness, contrast ratio, and viewing angle have been improved.

Wide range of operating temperature that covers outdoor use

The improved environmental resistance allows for use in a wider operating temperature range of -20 to +60 °C -4 to +140 °F.

UV Resistant, Anti-glare front panel

A front protection layer reduces the intensity of UV rays and has an anti-glare coating.

Impressive water resistance makes usage possible in areas prone to water contact.

The front panel is IP67 rated with added protection applied to the rear of the unit for a more rugged overall construction.

Built-in SD / SDHC memory card slot *1

Easy to copy, back up, and restore screen data.

*1: Class 10 compatible with a card of up to 32 GB.

Integrated USB Interface

You can connect your PC and GT32-E using your USB cable to transfer screen data.

When used with our FP series PLC, this display supports the pass through function, which allows simultaneous debugging of the PLC and the display.

Transformer-isolated power supply

The isolated power supply enhances the reliability.

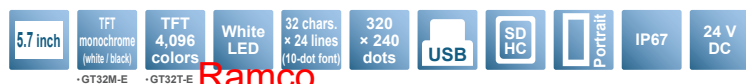
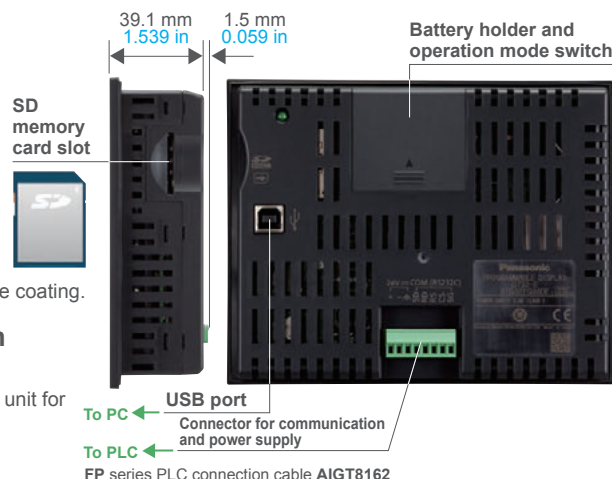
Silver



GT32M-E

163.2 mm
6.425 in

128.8 mm
5.071 in



Ramco

GT02L

Discontinuation plan
Orders to end on September 30, 2025

Programmable Display

Entry-level Model Touch Panel

3.7 inch CE UK CA cUL US

Entry-level model

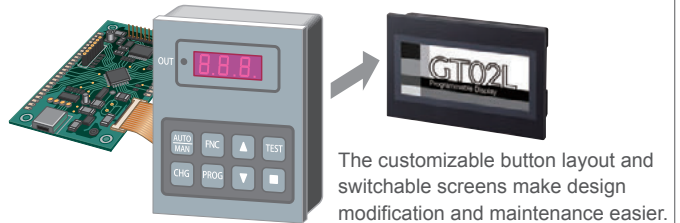
Black



For replacing your touch panel



For replacement of your membrane-type switch panel



Compact body with a wide LCD that is the largest size in its class

The small body of 74 mm 2.913 in high and 112 mm 4.409 in wide is equipped with a 3.7 inch large LCD. The analog touch system does not display any annoying visible dots or lines.

MiniUSB interface as standard equipment

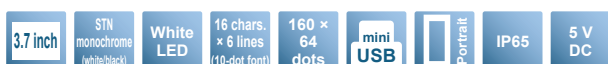
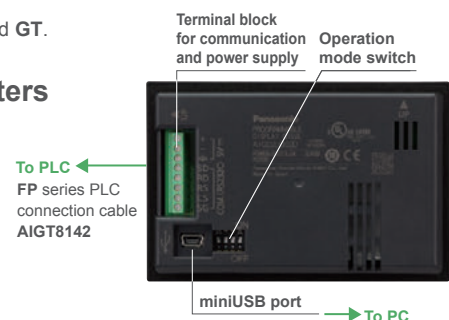
Supports the through function using a USB cable, allowing simultaneous debugging of PLC and GT.

Flexible sizing and layout available for switches and characters

Switches of a minimum of 8 × 8 dots can be moved in increments of one dot. A wide range of character fonts and sizes (10 to 64 dots) are supported.

Portrait orientation ideal for narrow spaces

Installation in narrow spaces is possible, enhancing the degree of system design freedom.



• The panel face protection sheet for the GT series is available as an option.

• The LCD images on this page are composites.

GT02

Discontinuation plan
Type with SD memory card slot

Discontinuation plan
Type without SD memory card slot

Orders to end on September 30, 2024

Orders to end on September 30, 2025

Programmable Display

Compact advanced display with 3.8 inch high-contrast monochrome LCD
(for clear and vivid images)

3.8 inch



General-purpose model

Pure black



GT02G

Hairline silver



GT02M

112 mm
4.409 in

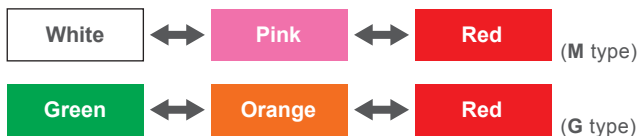
74 mm
2.913 in

3.8 inch high-contrast monochrome LCD provides top-level viewability.

High-definition 240 × 96 dots LCD produces crisp images. The analog touch screen technology does not display any annoying visible dots or lines.

Bright three-color LED backlight indicates the equipment status.

The color combination is white / pink / red or green / orange / red. The backlight ensures both operability and visibility.



27 mm
1.063 in

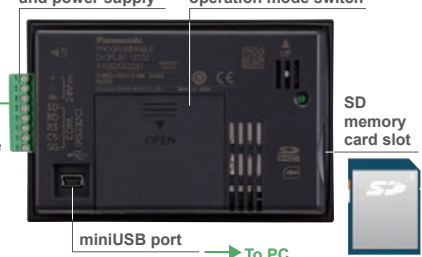


SD / SDHC memory card slot as equipment*1

AIG02MQ2*D and AIG02GQ2*D are equipped with an SD / SDHC memory card slot.
Easy to copy, back up, and restore screen data.

*1: Class 10 compatible with a card of up to 32 GB.

To PLC
FP series PLC
connection cable
AIGT8162 and
AIGT8142



MiniUSB interface as standard equipment

Supports the through function using a USB cable, allowing simultaneous debugging of PLC and GT.

Flexible sizing and layout available for switches and characters

Switches of a minimum of 8 × 8 dots can be moved in increments of one dot.
A wide range of character fonts and sizes (10 to 96 dots) are supported.

Equipped with IP67-rated body and newly designed bracket

Portrait orientation ideal for narrow spaces

Installation in narrow spaces is possible, enhancing the degree of system design freedom.

Application example:
Water purifier



* The panel face protection sheet for the GT series is available as an option.

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GT12

Discontinuation plan
Type with SD memory card slot

Discontinuation plan
Type without SD memory card slot

Orders to end on September 30, 2024

Orders to end on September 30, 2025

Programmable Display

Slim body equipped with a 4.6 inch half-QVGA LCD

The highest visual quality in its class

4.6 inch



General-purpose model

Pure black



GT12M

Hairline silver



GT12G

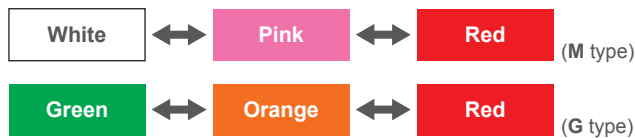
4.6 inch TFT high-contrast monochrome half-QVGA LCD with a wide viewing angle provides top-level viewability*1.

High-definition half-QVGA (320 × 120) LCD produces crisp images. The analog touch screen technology does not display any annoying visible dots or lines.

*1: The display has been changed STN LCD to TFT LCD from production in November 2016.

Bright three-color LED backlight indicates the equipment status.

The color combination is white / pink / red or green / orange / red. The backlight ensures both operability and visibility.



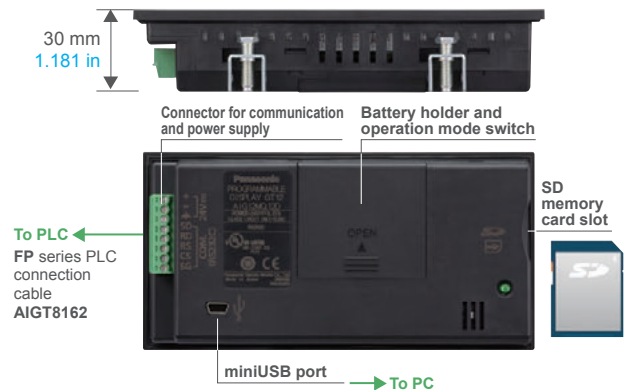
SD / SDHC memory card slot as equipment*2

AIG12MQ1*D and AIG12GQ1*D are equipped with an SD / SDHC memory card slot. Easy to copy, back up, and restore screen data.

*2: Class 10 compatible with a card of up to 32 GB.

MiniUSB interface as standard equipment

Supports the through function using a USB cable, allowing simultaneous debugging of PLC and GT.



Flexible sizing and layout available for switches and characters

Switches of a minimum of 8 × 8 dots can be moved in increments of one dot. A wide range of character fonts and sizes (10 to 120 dots) are supported.

Transformer-isolated power supply

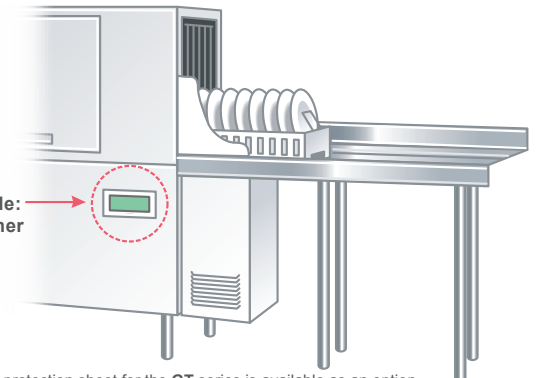
The isolated power supply enhances the reliability.

Equipped with IP67-rated body

Portrait orientation ideal for narrow spaces

Installation in narrow spaces is possible, enhancing the degree of system design freedom.

Application example:
Business dishwasher



* The panel face protection sheet for the GT series is available as an option.

GT05

Discontinuation plan

Orders to end on September 30, 2024

Programmable Display

Compact size and equipped with a QVGA LCD

Both the color and monochrome types display striking images

3.5 inch



(Excluding GT05G)

General-purpose model

Pure black



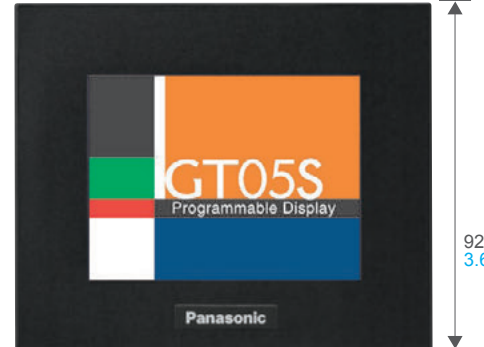
GT05M

Hairline silver



GT05G

Pure black



GT05S

92.2 mm
3.630 in

110 mm
4.331 in



GT05M: red



GT05M: pink



GT05G: orange



GT05G: red

GT05M / GT05G

3.5 inch TFT high-contrast monochrome QVGA LCD with a wide viewing angle^{*1}

^{*1}: The display has been changed STN LCD to TFT LCD from production in March 2016.

Bright LED backlight adopted

GT05M displays screens in white, red, and pink, and GT05G in green, orange, and red, ensuring both operability and visibility.

Common features

SD / SDHC memory card slot as standard equipment^{*3}

Easy to copy, back up, and restore screen data.

^{*3}: Class 10 compatible with a card of up to 32 GB.

USB interface as standard equipment

Supports the through function using a USB cable, allowing simultaneous debugging of PLC and GT.

Characters of a 240 dots maximum size can be displayed.

Capable of displaying several fine 10-dot characters or one 240 dots character in full screen.

Transformer-isolated power supply

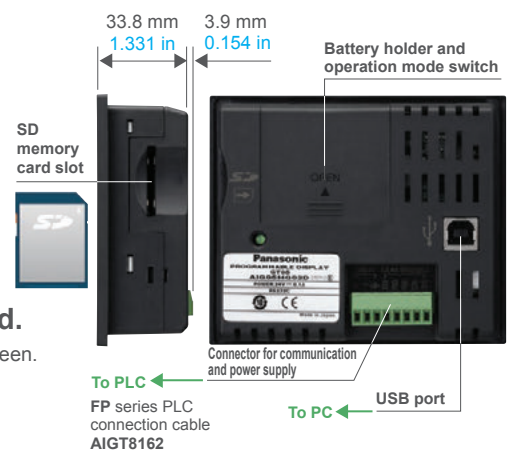
The isolated power supply enhances the reliability.

GT05S

3.5 inch TFT 4,096 colors QVGA LCD with a wide viewing angle^{*2}

^{*2}: The display has been changed STN LCD to TFT LCD from production in December 2011.

Bright LED backlight adopted



3.5 inch	TFT monochrome (white/black)	3-color LED (white/pink/red) (green/orange/red)	TFT 4,096 colors	White LED	32 chars. × 24 lines (10-dot font)	320 × 240 dots	USB	SD HC	Portrait	IP65	24 V DC
	• GT05M • GT05G	• GT05M • GT05G	• GT05S	• GT05S							

^{*} The panel face protection sheet for the GT series is available as an option.

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GT32-R

⚠ Discontinuation plan

Orders to end on September 30, 2024

Programmable Display

GT32M/T now with improved performance!



5.7 inch



General-purpose model

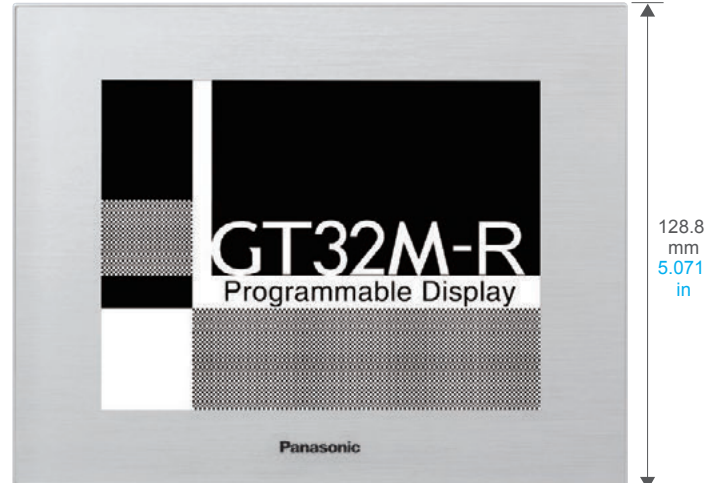
Pure black



GT32T-R

GT32T-R

Hairline silver



GT32M-R

163.2 mm
6.425 in

5.7 inch, 4,096 colors TFT color LCD equipped with long life LED backlight

Great visibility even in bright environments is possible thanks to use of a TFT LCD with contrast ratio of 500 : 1.

GT32M-R

5.7 inch, 16-gray scale TFT monochrome LCD equipped with long life LED backlight

Through use of a TFT LCD with contrast ratio of 400 : 1, the "deep black" on a bright display means incredible visibility even in bright environments.

Common features

Slim frame and body

Designed for easy installation with slim frame and body compared to LCD.

Built-in SD / SDHC memory card slot *1

Easy to copy, back up, and restore screen data.
Data logging possible.

*1: Class 10 compatible with a card of up to 32 GB.

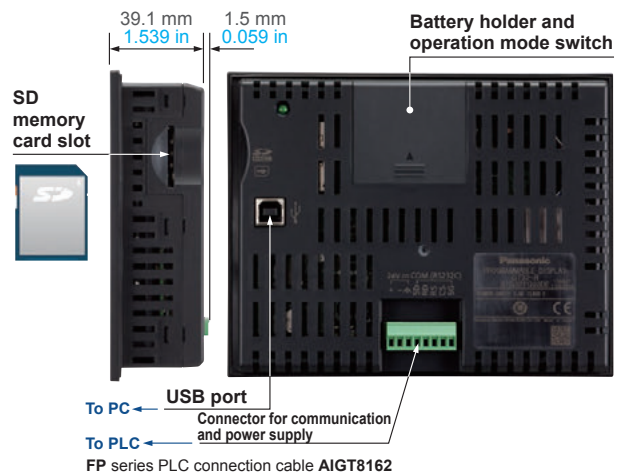
Integrated USB Interface

You can connect your PC and GT32-R using your USB cable to transfer screen data.

When used with our FP series PLC, this display supports the pass through function, which allows simultaneous debugging of the PLC and the display.





Transformer-isolated power supply

The isolated power supply enhances the reliability.



* The panel face protection sheet for the GT series is available as an option.

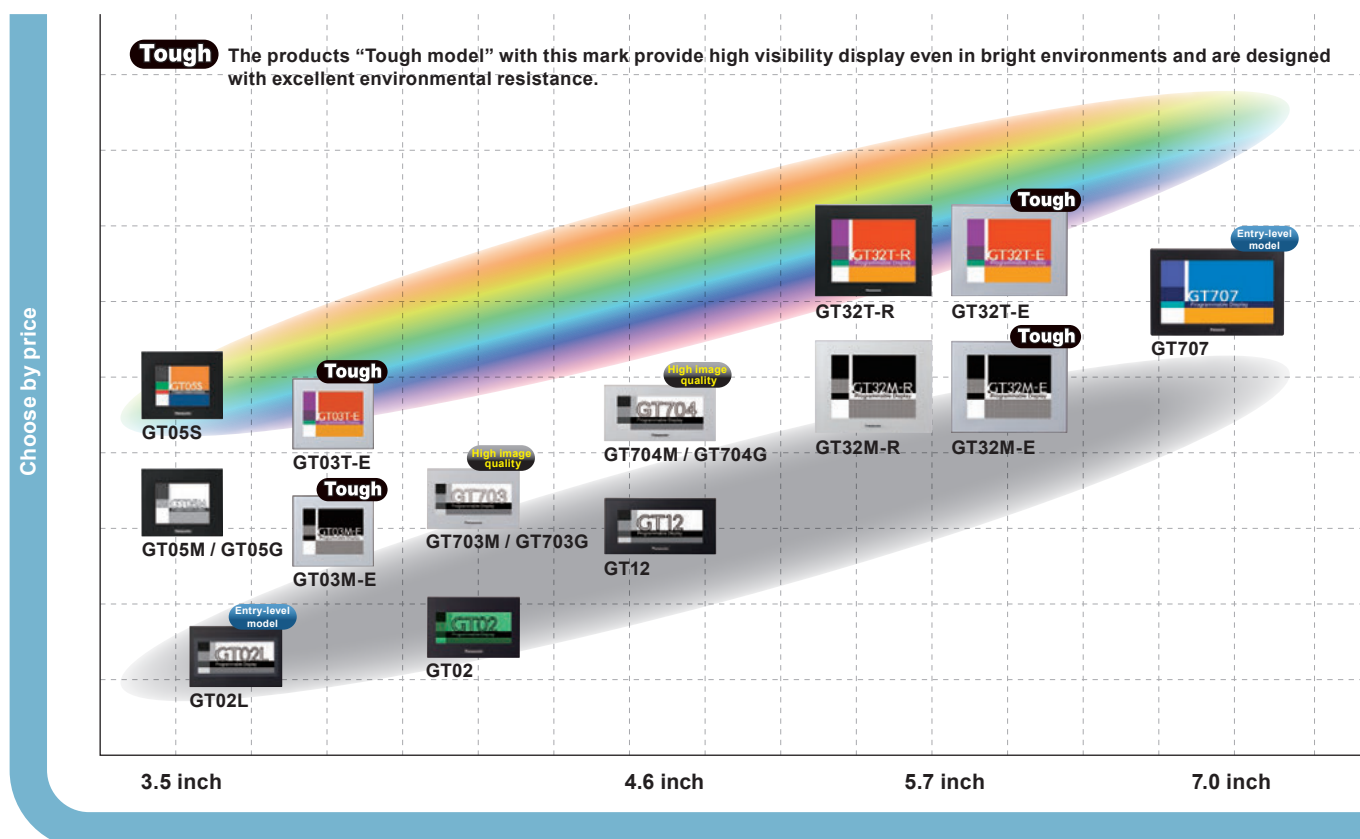
GTseries

		Power supply	Display							External interface	
			Screen size	Display type	Display color	Resolution	Backlight	Displayable characters (Note)	Memory capacity (F-ROM)	USB port	SD / SDHC memory card
General-purpose model	GT32M-R  P.21	24 V DC	5.7 inch	TFT monochrome LCD	2 colors (black / white) (16-gray scale)	320(W) × 240(H) dots	White LED	768 characters	12 Mbyte	○	○
	GT32T-R  P.21	24 V DC	5.7 inch	TFT color LCD	4,096 colors	320(W) × 240(H) dots	White LED	768 characters	12 Mbyte	○	○
Entry-level model	GT707  P.16	24 V DC	7 inch widescreen	TFT color LCD	65,536 colors	800(W) × 480(H) dots	White LED	600 characters	76 Mbyte	○ (mini)	○
	GT02L  P.17	5 V DC	3.7 inch	STN monochrome LCD	2 colors (black / white)	160(W) × 64(H) dots	White LED	96 characters	704 kbyte	○ (mini)	—

















*Note: With the 10-dot font (For GT707: 32-dot font)

Product types

Choose what you are looking for by screen size and price.



GTseries

			Power supply	Display						External interface		
				Screen size	Display type	Display color	Resolution	Backlight	Displayable characters (Note)	Memory capacity (F-ROM)	USB port	SD / SDHC memory card
Tough Environmentally-resistant Tough model	GT03-E  GT03M-E  GT03T-E	P.8	24 V DC	3.5 inch	TFT monochrome LCD	2 colors (black / white) (16-gray scale)	320(W) × 240(H) dots	White LED	768 characters	6 Mbyte	○ (mini)	—
				3.5 inch	TFT color LCD	4,096 colors	320(W) × 240(H) dots	White LED	768 characters	12 Mbyte	○ (mini)	○
	GT32-E  GT32M-E  GT32T-E	P.9	24 V DC	5.7 inch	TFT monochrome LCD	2 colors (black / white) (16-gray scale)	320(W) × 240(H) dots	White LED	768 characters	12 Mbyte	○	○
				5.7 inch	TFT color LCD	4,096 colors	320(W) × 240(H) dots	White LED	768 characters	12 Mbyte	○	○
High image quality model	GT703  GT703M  GT703G	P.4	5 V DC 24 V DC	3.8 inch	TFT monochrome LCD	2 colors (black / white) (64-gray scale)	480(W) × 192(H) dots	GT703M: 3-color LED (white / pink / red) GT703G: 3-color LED (green / orange / red)	912 characters	16 Mbyte	○ (mini)	○
	GT704  GT704M  GT704G	P.5										
General-purpose model	GT02  GT02M  GT02G	P.18	5 V DC 24 V DC	3.8 inch	TFT monochrome LCD	2 colors (black / white)	240(W) × 96(H) dots	GT02M: 3-color LED (white / pink / red) GT02G: 3-color LED (green / orange / red)	216 characters	2 Mbyte	○ (mini)	○ AIG02MQ2+D and AIG02GQ2+D only
	GT12  GT12G  GT12M	P.19										
	GT05  GT05M  GT05G	P.20	GT05M / GT05G									
				24 V DC	3.5 inch	TFT monochrome LCD	2 colors (black / white)	320(W) × 240(H) dots	GT05M: 3-color LED (white / pink / red) GT05G: 3-color LED (green / orange / red)	768 characters	2 Mbyte	○
	GT05S  GT05S  GT05S		GT05S									
			24 V DC	3.5 inch	TFT color LCD	4,096 colors	320(W) × 240(H) dots	White LED	768 characters	12 Mbyte	○	○

Note: With the 10-dot font.

GTseries

PLC COMPATIBILITY TABLE

Models listed are the models that have been evaluated as of March, 2018.

Company name	Series	Model	RS-232C type	RS-422 / RS-485 type ^{*2}
Our company	FP series	FP7	○	○
		FP0H	○	○
		FP-X	○	○
		FP-X0	○	○
		FPΣ	○	○
		FP-e	○	○
		FP0	○	○
		FP0R	○	○
		FP2	○	○
		FP2SH	○	○
Mitsubishi Electric ^{*1}	FX series	FX0N	○	○
		FX1S	○	○
		FX1N	○	○
		FX1NC	○	○
		FX2N	○	○
		FX2NC	○	○
		FX3UC	○	○
		FX3U	○	○
		FX3G	○	○
		FX3GC	○	○
		FX5U	○	○
		FX5UC	○	○
	Q series	Q00CPU	○	
		Q01CPU	○	
		Q00JCPU	○	
		Q00HCPU	○	
		Q00UJCPU	○	
		Q26UDHCPU	○	○
		Q25HCPU	○	
		Q12HCPU	○	
		Q06HCPU	○	
		Q02HCPU	○	
		Q02CPU	○	
	A series (Except GT7□□)	A1N	○	
		A2N	○	
		A3N	○	
		A1S	○	
		A1SJ	○	
		A2SH	○	
		A1SH	○	
		A2CCPU24	○	
	L series	L26CPU-BT	○	○
		L02SCPU	○	○
Omron ^{*1}	C series	C200H	○	
		C200HS	○	
		C500	○	
		C500F	○	
		C1000H	○	
		C2000	○	
		C2000H	○	
		C1000HF	○	
		C20H	○	
		C28H	○	
		C40H	○	
		C120	○	
		C120F	○	
		CQM1-CPU42	○	
		SRM1-C02	○	
		CPM2A	○	
		CPM1-20CDR-A	○	
		CQM1H-CPU21	○	
		CPM2C	○	
		CPM2B	○	
	α series	C200HE-CPU32(-Z)	○	
		C200HG-CPU33(-Z)	○	
		C200HG-CPU53(-Z)	○	
		C200HX-CPU34(-Z)	○	
		C200HX-CPU54(-Z)	○	
		C200HE-CPU42(-Z)	○	
		C200HG-CPU43(-Z)	○	
		C200HG-CPU63(-Z)	○	
		C200HX-CPU44(-Z)	○	
		C200HX-CPU64(-Z)	○	
		C200HX-CPU65-Z	○	
		C200HX-CPU85-Z	○	
	CV series	CV500	○	
		CV1000	○	
		CVM1	○	

Company name	Series	Model	RS-232C type	RS-422 / RS-485 type ^{*2}
Omron ^{*1}	CS1 series	CS1H-CPU67	○	
		CS1H-CPU66	○	
		CS1H-CPU65	○	
		CS1H-CPU64	○	
		CS1H-CPU63	○	
		CS1G-CPU45	○	
		CS1G-CPU44	○	
		CS1G-CPU43	○	
		CS1G-CPU42	○	
	CJ series	CJ1H	○	
		CJ1M	○	
		CJ1G	○	
		CJ2H	○	
	CP1 series	CJ2M	○	
		CP1H	○	
		CP1L	○	
		CP1E	○ ^{*4}	○
Toshiba Machine ^{*1}	TC mini series		○	○
Yokogawa Electric ^{*1}	FA-M3 series	F3SP59-7S	○	
		F3SP58-6S	○	
		F3SP58-6H	○	
		F3SP53-4S	○	
		F3SP53-4H	○	
		F3SP38-6S	○	
		F3SP38-6N	○	
		F3SP35-5N	○	
		F3SP28-3S	○	
		F3SP28-3N	○	
		F3SP25-2N	○	
		F3SP21-0N	○	
KEYENCE ^{*1}	KV series	KV Nano series	○	
		KV-10/16/24/40	○	
		KV700	○	○
		KV1000	○	○
		KV3000	○	○
Hitachi Industrial Equipment Systems ^{*1}	EHV-CPU128 series	KV5000	○	○
		EHV-CPU128	○	○
		EHV-CPU64	○	○
		EHV-CPU32	○	○
	EH150 series	EHV-CPU16	○	○
		EH-CPU104A	○	○
		EH-CPU208A	○	○
		EH-CPU316A	○	○
	MICRO-EH series	EH-CPU516	○	○
		EH-CPU548	○	○
		10-point	○	
Rockwell Automation ^{*1} (Allen-Bradley) Models that support DF protocol	MicroLogix series	14 / 20-point	○	
		23 / 28-point	○	○
		40 / 64-point	○	
		23-point	○	○
Siemens ^{*1}	S7-200 series	Web controller	○	○
		MicroLogix500	○	
		MicroLogix1000	○	
		MicroLogix1100	○	
LS Industrial Systems ^{*1}	MASTER-K series	SLC-500 series	○	
		SLC-5/03	○	
Modbus ^{*1}	General-purpose serial	SLC-5/04	○	
		CPU222	○	○
General-purpose serial	Our dedicated protocol	CPU216	○	○
		CPU215	○	○
LS Industrial Systems ^{*1}	MASTER-K series	CPU214	○	○
		CPU212	○	○
Modbus ^{*1}	General-purpose serial	80S / 200S	○	
		300S / 1000S	○	
General-purpose serial	Our dedicated protocol	*3	○	○
		*3	○	○

*1: PLCs other than our FP series may be limited in the type of device that can be used and addresses. Please see manual for details.

*2: Communication may not be possible when using RS-485 depending on the sending and receiving timing with the other device.

*3: We cannot specify what other device you should use; therefore, please test it using the actual equipment before using.

*4: Available for models equipped with on RS-232C port.

○: Direct connection is possible to the CPU unit of the PLC.

○: Connection is possible using the communications unit or a signal conversion cable, etc.

(Example: The QJ71C24N or QJ71C24N-R2 calculator link unit is required when using the Mitsubishi Q Series.)

x: Connection is not possible

Blank: Not evaluated.

Refer to the HELP of the latest version of tool software "Terminal GTWIN", or GT series Connection with other companies' PLC's Manual for more details such as usable devices and addresses. Information on how to connect our programmable display and PLC is available. The manual can be downloaded from our website.

GTseries | PART NUMBER LIST

Main Unit and Tool Software

Type	Product name	Description						Part No.			
		LCD	Screen size	Power supply	Communication port	Color of front panel	SD memory card slot (Note)				
Tough Environmentally-resistant Tough model	GT03M-E	TFT monochrome LCD (white backlight)	3.5 inch	24 V DC	RS-232C	Silver	Not available	AIG03MQ03DE ^{*1}			
		RS-422 / RS-485			AIG03MQ05DE ^{*1}						
	GT03T-E	TFT color LCD (white backlight)			RS-232C	Silver	Available	AIG03TQ13DE ^{*2}			
		RS-422 / RS-485	AIG03TQ15DE ^{*2}								
	GT32M-E	TFT monochrome LCD (white backlight)	5.7 inch		RS-232C	Silver	Available	AIG32MQ03DE ^{*2}			
		RS-422 / RS-485			AIG32MQ05DE ^{*2}						
	GT32T-E	TFT color LCD (white backlight)		RS-232C	Silver	Available	AIG32TQ03DE ^{*2}				
		RS-422 / RS-485	AIG32TQ05DE ^{*2}								
High image quality model	GT703M	TFT monochrome LCD (white / pink / red backlight)	3.8 inch	5 V DC	RS-232C	Pure black	Available	AIG703WMN1B5			
						Silver		AIG703WMN1S5			
					RS-422 / RS-485	Pure black		AIG703WMNMB5			
						Silver		AIG703WMNMS5			
				24 V DC	RS-232C	Pure black	Available	AIG703WMN1B2			
						Silver		AIG703WMN1S2			
					RS-422 / RS-485	Pure black		AIG703WMNMB2			
						Silver		AIG703WMNMS2			
	GT703G	TFT monochrome LCD (green / orange / red backlight)		5 V DC	RS-232C	Pure black	Available	AIG703WGN1B5			
						Silver		AIG703WGN1S5			
					RS-422 / RS-485	Pure black		AIG703WGNMB5			
						Silver		AIG703WGNMS5			
				24 V DC	RS-232C	Pure black	Available	AIG703WGN1B2			
						Silver		AIG703WGN1S2			
					RS-422 / RS-485	Pure black		AIG703WGNMB2			
						Silver		AIG703WGNMS2			
	GT704M	TFT monochrome LCD (white / pink / red backlight)	4.6 inch	24 V DC	RS-232C	Pure black	Available	AIG704WMN1B2			
						Silver		AIG704WMN1S2			
					RS-422 / RS-485	Pure black		AIG704WMNMB2			
						Silver		AIG704WMNMS2			
					GT704G	TFT monochrome LCD (green / orange / red backlight)	24 V DC	RS-232C	Pure black	Available	AIG704WGN1B2
									Silver		AIG704WGN1S2
								RS-422 / RS-485	Pure black		AIG704WGNMB2
									Silver		AIG704WGNMS2
General-purpose model	GT02M	TFT monochrome LCD (white / pink / red backlight)	3.8 inch	5 V DC	RS-232C	Pure black	Not available	AIG02MQ02D ^{*1}			
						Hairline silver		AIG02MQ03D ^{*1}			
					RS-422 / RS-485	Pure black		AIG02MQ04D ^{*1}			
						Hairline silver		AIG02MQ05D ^{*1}			
				24 V DC	RS-232C	Pure black		AIG02MQ12D ^{*1}			
						Hairline silver		AIG02MQ13D ^{*1}			
					RS-422 / RS-485	Pure black		AIG02MQ14D ^{*1}			
						Hairline silver		AIG02MQ15D ^{*1}			
					RS-232C	Pure black	Available	AIG02MQ22D ^{*2}			
						Hairline silver		AIG02MQ23D ^{*2}			
					RS-422 / RS-485	Pure black		AIG02MQ24D ^{*2}			
						Hairline silver		AIG02MQ25D ^{*2}			
	GT02G	TFT monochrome LCD (green / orange / red backlight)	3.8 inch	5 V DC	RS-232C	Pure black	Not available	AIG02GQ02D ^{*1}			
						Hairline silver		AIG02GQ03D ^{*1}			
					RS-422 / RS-485	Pure black		AIG02GQ04D ^{*1}			
						Hairline silver		AIG02GQ05D ^{*1}			
				24 V DC	RS-232C	Pure black		AIG02GQ12D ^{*1}			
						Hairline silver		AIG02GQ13D ^{*1}			
					RS-422 / RS-485	Pure black		AIG02GQ14D ^{*1}			
						Hairline silver		AIG02GQ15D ^{*1}			
					RS-232C	Pure black	Available	AIG02GQ22D ^{*2}			
						Hairline silver		AIG02GQ23D ^{*2}			
					RS-422 / RS-485	Pure black		AIG02GQ24D ^{*2}			
						Hairline silver		AIG02GQ25D ^{*2}			
	GT05M	TFT monochrome LCD (white / pink / red backlight)	3.5 inch	24 V DC	RS-232C	Pure black	Available	AIG05MQ02D ^{*2}			
						Hairline silver		AIG05MQ03D ^{*2}			
					RS-422 / RS-485	Pure black		AIG05MQ04D ^{*2}			
						Hairline silver		AIG05MQ05D ^{*2}			
	GT05G	TFT monochrome LCD (green / orange / red backlight)	3.5 inch	24 V DC	RS-232C	Pure black	Available	AIG05GQ02D ^{*2}			
						Hairline silver		AIG05GQ03D ^{*2}			
					RS-422 / RS-485	Pure black		AIG05GQ04D ^{*2}			
						Hairline silver		AIG05GQ05D ^{*2}			
	GT05S	TFT color LCD (white backlight)	3.5 inch	24 V DC	RS-232C	Pure black	Available	AIG05SQ02D ^{*2}			
						Hairline silver		AIG05SQ03D ^{*2}			
					RS-422 / RS-485	Pure black		AIG05SQ04D ^{*2}			
						Hairline silver		AIG05SQ05D ^{*2}			

Note: The model of the "Available" have a built-in clock.

*1: The order is scheduled to close at the end of September 2025 and there is no recommended substitute.

*2: The order is scheduled to close at the end of September 2024 and there is no recommended substitute.

Main Unit and Tool Software

Type	Product name	Description						Part No.
		LCD	Screen size	Power supply	Communication port	Color of front panel	SD memory card slot (Note)	
General-purpose model	GT12M	TFT monochrome LCD (white / pink / red backlight)	4.6 inch	24 V DC	RS-232C	Pure black	Not available	AIG12MQ02D ^{*1}
						Hairline silver		AIG12MQ03D ^{*1}
					RS-422 / RS-485	Pure black		AIG12MQ04D ^{*1}
						Hairline silver		AIG12MQ05D ^{*1}
					RS-232C	Pure black	Available	AIG12MQ12D ^{*2}
						Hairline silver		AIG12MQ13D ^{*2}
						Pure black		AIG12MQ14D ^{*2}
						Hairline silver		AIG12MQ15D ^{*2}
					RS-422 / RS-485	Pure black		AIG12MQ15D ^{*2}
						Hairline silver		AIG12MQ15D ^{*2}
	GT12G	TFT monochrome LCD (green / orange / red backlight)	4.6 inch	24 V DC	RS-232C	Pure black	Not available	AIG12GQ02D ^{*1}
						Hairline silver		AIG12GQ03D ^{*1}
					RS-422 / RS-485	Pure black		AIG12GQ04D ^{*1}
						Hairline silver		AIG12GQ05D ^{*1}
					RS-232C	Pure black	Available	AIG12GQ12D ^{*2}
						Hairline silver		AIG12GQ13D ^{*2}
						Pure black		AIG12GQ14D ^{*2}
						Hairline silver		AIG12GQ15D ^{*2}
					RS-422 / RS-485	Pure black		AIG12GQ15D ^{*2}
						Hairline silver		AIG12GQ15D ^{*2}
	GT32M-R	TFT monochrome LCD (white backlight)	5.7 inch	24 V DC	RS-232C	Pure black	Available	AIG32MQ02DR ^{*2}
						Hairline silver		AIG32MQ03DR ^{*2}
					RS-422 / RS-485	Pure black		AIG32MQ04DR ^{*2}
						Hairline silver		AIG32MQ05DR ^{*2}
	GT32T-R	TFT color LCD (white backlight)	5.7 inch	24 V DC	RS-232C	Pure black	Available	AIG32TQ02DR ^{*2}
						Hairline silver		AIG32TQ03DR ^{*2}
					RS-422 / RS-485	Pure black		AIG32TQ04DR ^{*2}
						Hairline silver		AIG32TQ05DR ^{*2}
Entry-level model	GT707	TFT color LCD (white backlight)	7 inch widescreen	24 V DC	RS-232C	Black	Available	AIG707WCL1G2
	GT02L	STN monochrome LCD (white backlight)	3.7 inch	5 V DC	RS-232C	Black	Not available	AIG02LQ02D ^{*1}
Terminal GTWIN Ver.3 ^{*3}		Japanese version	Terminal GTWIN CD-ROM					AIGSGT7JP
		English version	Terminal GTWIN CD-ROM					AIGSGT7EN

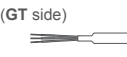





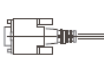

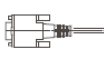





Note: The model of the "Available" have a built-in clock.

*1: The order is scheduled to close at the end of September 2025 and there is no recommended substitute.

*2: The order is scheduled to close at the end of September 2024 and there is no recommended substitute.

*3: Some functions are not supported in **GT** series other than **GT703** / **GT704** / **GT707**.

Cables | PLC connection cable

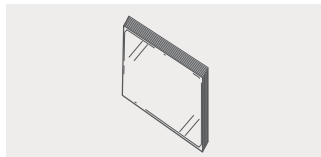
Power supply and communication port	Connection cable		PLC
5 V DC RS-232C	 (GT side)	 (PLC side) Part No.: AIGT8142 ^{*1} PLC connection cable (2 m 6.562 ft) 5-pin mini DIN connector — 4 single wires + shielding wire	Our FP series (except FP7/FP0H/FP-XH) ^{*2}
5 V DC RS-422 / RS-485	 (GT side)	 (PLC side) Part No.: AIGT8152 ^{*1} PLC connection cable (2 m 6.562 ft) 8-pin mini DIN connector — 6 single wires + shielding wire	Mitsubishi Electric FX series
24 V DC RS-232C	 (GT side)	 (PLC side) Part No.: AIGT8162 PLC connection cable (2 m 6.562 ft) 5-pin mini DIN connector — 3 single wires + shielding wire AIGT8165 (5 m 16.404 ft) and AIGT8160 (10 m 32.808 ft) are also available.	Our FP series (except FP7/FP0H/FP-XH) ^{*2}
24 V DC RS-232C	 (GT side)	 (PLC side) Part No.: AFC8503 For GT707 , PLC connection cable (L type: 3 m 9.843 ft) 9-pin D-SUB connector — 5-pin mini DIN connector	Our FP series (except FP7/FP0H/FP-XH) ^{*3}
24 V DC RS-232C	 (GT side)	 (PLC side) Part No.: AFC8503S For GT707 , PLC connection cable (straight type: 3 m 9.843 ft) 9-pin D-SUB connector — 5-pin mini DIN connector	Our FP series (except FP7/FP0H/FP-XH) ^{*3}
24 V DC RS-422 / RS-485	 (GT side)	 (PLC side) Part No.: AIGT8175 PLC connection cable (5 m 16.4 ft) 8-pin mini DIN connector — 4 single wires + shielding wire	Mitsubishi Electric FX series
24 V DC RS-232C	 (GT side)	 (PLC side) Part No.: AIP81842 PLC connection cable (2 m 6.562 ft) 9-pin D-SUB connector — 6 single wires	FP2 / FP2SH COM port, CCU (Computer Communication Unit)

*1: This cable is exclusively designed for the **GT** series (5 V DC) and is powered by PLC.

*2: For **FP7/FP0H/FP-XH** series, please use a commercially available discrete wire cable.

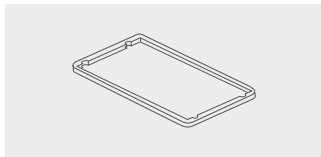
*3: For **FP7/FP0H/FP-XH** series, please use commercially available D-SUB 9-pin (female) connector cable with discrete wire.

Options



■ **Panel face protection sheets**
10 sheets in a set (option)

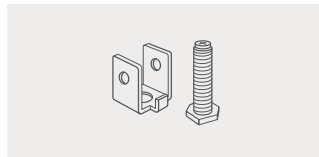
For GT02L / GT02 / GT703	Part No.: AIG02800
For GT05	Part No.: AIG05800
For GT12 / GT704	Part No.: AIG12800
For GT32-R	Part No.: AIG32800
For GT707	Part No.: AIG7A07S01



■ **Waterproof packing**
Waterproof packing (for replacement), 10 pieces in a set
Package includes one piece.

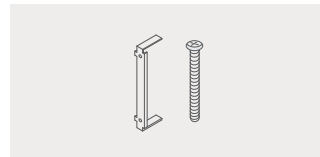
For GT02L / GT02 / GT703	Part No.: AIG02810
For GT03-E	Part No.: AIG03810E
For GT05	Part No.: AIG05810
For GT12 / GT704	Part No.: AIG12810
For GT32-R/E	Part No.: AIG32810E

* The waterproof packing for GT02(L) is different from the GT02L main unit accessory.



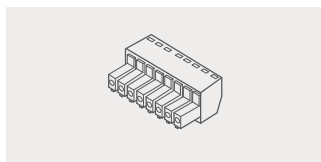
■ **GT02 / GT02L / GT703 / GT03-E / GT12 / GT704 mounting parts**
5 sets of mounting parts (4 parts / set)
Package includes one set.

Part No.: AIG12830



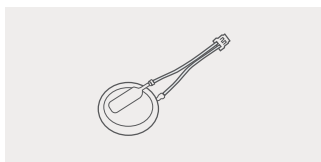
■ **GT05 / GT32-R / GT32-E mounting parts**
5 sets of mounting parts (2 parts / set)
Package includes one set.

Part No.: AIGT28321 For GT05
Part No.: AIG32830 For GT32-R/E



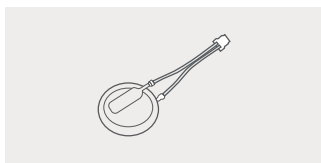
■ **Spare connector**
5 connectors for communication and power supply in a set
Package includes one set.

Part No.: AIGT084



■ **GT02 / GT703 / GT03-E / GT05 / GT12 / GT704 / GT32-R / GT32-E backup battery**

Part No.: AFPX-BATT



■ **GT707 backup battery**

Part No.: AFPABAT001

Product name		GT03M-E		GT03T-E		GT32M-E		GT32T-E	
Item	Type	RS-232C	RS-422 / RS-485	RS-232C	RS-422 / RS-485	RS-232C	RS-422 / RS-485	RS-232C	RS-422 / RS-485
Applicable regulations		CE Marking (EMC Directive, RoHS Directive) (Excluding some models), UKCA Marking (EMC Regulations, RoHS Regulations) (Excluding some models)							
Power supply		24 V DC							
Operating voltage range		21.6 to 26.4 V DC							
Power consumption		1.9 W or less		3.1 W or less		4.8 W or less		7.2 W or less	
Power supply unit isolation method						Transformer isolation			
Ambient temperature		-20 to +60 °C -4 to +140 °F (Note 1)							
Ambient humidity		10 to 90 % RH (at +25 °C +77 °F), (No dew condensation allowed)							
Storage temperature		-20 to +60 °C -4 to +140 °F							
Storage humidity		10 to 90 % RH (at +25 °C +77 °F), (No dew condensation allowed)							
Vibration resistance		5 to 8.4 Hz, amplitude 3.5 mm 0.138 in , 8.4 to 150 Hz, acceleration 9.8 m/s ² , 10 sweeps each in X, Y and Z directions (1 octave/min.)							
Shock resistance		147 m/s ² , 3 times in each of the X, Y and Z directions							
Superposed noise suppression		1,000 V [P-P] or more, pulse width of 50 ns, 1 μs between power supply terminals (by a noise simulator)							
Environmental resistance		IP67 (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.) (Note 2)							
Net weight		170 g approx.				470 g approx.			
Display	Display device	TFT monochrome LCD		TFT color LCD		TFT monochrome LCD		TFT color LCD	
	Resolution	320 (W) × 240 (H) dots							
	Display color	2 colors (black / white, 16-gray scale)		4,096 colors		2 colors (black / white, 16-gray scale)		4,096 colors	
	Displayable area	70.6 (W) × 52.9 (H) mm 2.780 (W) × 2.083 (H) in				115.2 (W) × 86.4 (H) mm 4.535 (W) × 3.402 (H) in			
	Backlight	White LED							
Functions	Font types	Fixed (GTWIN) : 1/4 width (8 × 8), half width (16 × 8), full width (16 × 16), Characters can be displayed in the 1, 2, 4, or 8 times width or height. True Type (GTWIN): 10 to 240 dots, Windows®: 10 to 240 dots							
	Languages	Japanese, English, Simplified Chinese, Traditional Chinese, Korean, German, Italian, Spanish, French, Turkish, Russian, Vietnamese							
	Graphics	Straight lines, Continuous straight lines, Squares, Circles, Ovals, Arcs, Elliptic arcs, Fan shapes, Elliptic fan shapes, Beveled squares, Bitmaps							
	Number of screens (Note 3)	230 screens approx.		180 screens approx.					
	Screen setting No.	Base screens: No. 0 to 3FF, Key board screens: No. 0 to 7, Login screens: No. 0 to F							
	Part functions	Messages, Lamps, Switches, Function switches, Data, Bar graphs, Clocks, Keyboards, Line graphs, Alarm list, Alarm history (Note 4), Custom parts (messages, lamps, switches)							
	Other functions	Recipe, Flow display, Write device, Multiple PLC connection, FP monitor, Language switching, GT link, Operation security, Data logging, SD recipe (Note 5)							
	Clock function	Displayed by referencing PLC clock		Provided with a built-in clock. (Can also refer to and display a PLC clock.) * Buy the backup battery (AFPX-BATT).					
	Backlight brightness adjustment	Can be set on the menu screen, via the GT configuration screen of GTWIN , or via PLC.							
	Contrast adjustment	Unnecessary							
	Buzzer	Installed							
	Automatic communication settings	The communication speed (baud rate) is automatically changed if there is no response from the target equipment.							
	Through function	GT connected between PC and PLC allows PLC to be debugged without a direct connection to a PC.							
Screen creation	Dedicated software should be used. Applicable OS: Windows® 2000 / XP / Vista / 7 / 8 / 8.1 / 10 (Note 6)								
Touch key resolution		Free layout (8 dots min.)							
Touch key operation force		0.8 N or less							
Touch key life		1 million operations or more (at +25 °C +77 °F)							
COM. port	Communication standard	Conforms to RS-232C	Conforms to RS-422 / RS-485	Conforms to RS-232C	Conforms to RS-422 / RS-485	Conforms to RS-232C	Conforms to RS-422 / RS-485	Conforms to RS-232C	Conforms to RS-422 / RS-485
	External communication conditions	Baud rate: 9,600 bps, 19,200 bps, 38,400 bps, 57,600 bps, 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, and Other companies' PLC supported (Refer to the " PLC COMPATIBILITY TABLE " on p.23 for manufacturers and models.)							
	Connector	Connector terminal block (8 pins)							
Screen data transfer interface	Communication standard	USB1.1							
	Protocol	Our dedicated protocol							
	Connector	USB Mini-B				USB TYPE-B			
User's memory	Memory	F-ROM							
	Capacity	6 Mbyte		12 Mbyte					
Memory backup	Memory	SRAM							
	Backup battery	Lithium battery (replaceable) AFPX-BATT (Does not include with product.)							

Conformance to the UL / c-UL standards

UL / c-UL file No.	E96300
UL standard No.	UL508

- Notes: 1) Please use within a temperature range of - 20 to + 55 °C **- 4 to + 131 °F** when horizontally installed and vertically installed in a portrait orientation, upside down installed and when using battery.
2) This protective structure condition applies to the front surface of the installed panel. This condition does not guarantee usage in all environments provided by users. When reattaching the panel, replace the waterproof packing.
3) The number of screens that can be registered varies according to the registered contents.
4) The alarm history function is not supported for the **GT03M-E**.
5) The data logging and SD recipe functions are available with only models equipped with an SD / SDHC memory card slot.
6) The 64-bit version is not supported except for Windows® 7 / 8 / 8.1 / 10. Windows is registered trademark of Microsoft Corporation in the United States and other countries.

GTseries

SPECIFICATIONS

Product name		GT02L				GT02				GT05M / GT05G				GT05S							
Item	Type	5 V, RS-232C		5 V, RS-422 / RS-485		5 V, RS-232C		5 V, RS-422 / RS-485		24 V, RS-232C		24 V, RS-422 / RS-485		RS-232C		RS-422 / RS-485		RS-232C		RS-422 / RS-485	
Applicable regulations		CE Marking (EMC Directive, RoHS Directive) (Excluding some models), UKCA Marking (EMC Regulations, RoHS Regulations) (Excluding some models)																			
Power supply		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		1 W or less								1.9 W or less				2.4 W or less				3.6 W or less			
Power supply unit isolation method		_____										Transformer isolation									
Ambient temperature		0 to +50 °C +32 to +122 °F																			
Ambient humidity		20 to 85 % RH (at +25 °C +77 °F), (No dew condensation allowed)																			
Storage temperature		-20 to +60 °C -4 to +140 °F																			
Storage humidity		10 to 85 % RH (at +25 °C +77 °F), (No dew condensation allowed)																			
Vibration resistance		5 to 8.4 Hz, amplitude 3.5 mm 0.138 in , 8.4 to 150 Hz, acceleration 9.8 m/s ² , 10 sweeps each in X, Y and Z directions (1 octave/min.)										10 to 55 Hz (1 minute cycle), Double amplitude 0.75 mm 0.030 in , 10 minutes in each of the X, Y, and Z directions									
Shock resistance		147 m/s ² , 3 times in each of the X, Y and Z directions										98 m/s ² , 4 times in each of the X, Y, and Z directions									
Superposed noise suppression		1,000 V [P-P] or more, pulse width of 50 ns, 1 μs between power supply terminals (by a noise simulator) (Note 1)																			
Environmental resistance		IP65 (in the initial stages) (Note 2)				IP67 (in the initial stages) (Note 2)				IP65 (in the initial stages) (Note 2)											
Net weight		150 g approx.				170 g approx.				230 g approx.											
Display	Display device	STN monochrome LCD				TFT monochrome LCD (Note 3)				TFT monochrome LCD (Note 4)				TFT color LCD (Note 5)							
	Resolution	160 (W) × 64 (H) dots				240 (W) × 96 (H) dots				320 (W) × 240 (H) dots											
	Display color	2 colors (black / white)										4,096 colors									
	Displayable area	88.0 (W) × 35.2 (H) mm 3.465 (W) × 1.386 (H) in				88.5 (W) × 35.4 (H) mm 3.484 (W) × 1.394 (H) in				70.6 (W) × 52.9 (H) mm 2.780 (W) × 2.083 (H) in				70.3 (W) × 52.7 (H) mm 2.768 (W) × 2.075 (H) in							
	Backlight	White LED				GT02M : 3-color LED (white / pink / red) GT02G : 3-color LED (green / orange / red)				GT05M : 3-color LED (white / pink / red) GT05G : 3-color LED (green / orange / red)				White LED							
Functions	Font types	Fixed (GTWIN) : 1/4 width (8 × 8), half width (16 × 8), full width (16 × 16) Characters can be displayed in the 1, 2, 4, or 8 times width or height. TrueType (GTWIN): 10 to 64 dots Windows®: 10 to 64 dots				Fixed (GTWIN) : 1/4 width (8 × 8), half width (16 × 8), full width (16 × 16) Characters can be displayed in the 1, 2, 4, or 8 times width or height. TrueType (GTWIN): 10 to 96 dots				Fixed (GTWIN) : 1/4 width (8 × 8), half width (16 × 8), full width (16 × 16) 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, Simplified Chinese, Traditional Chinese, Korean, German, Italian, Spanish, French, Turkish, Russian, Vietnamese																			
	Graphics	Straight lines, Continuous straight lines, Squares, Circles, Ovals, Arcs, Elliptic arcs, Fan shapes, Elliptic fan shapes, Beveled squares, Bitmaps																			
	Number of screens (Note 6)	80 screens approx.				250 screens approx.				240 screens approx.				180 screens approx.							
	Screen setting No.	No. 0 to 3FF																			
	Part functions	Messages, Lamps, Switches, Function switches, Data, Bar graphs, Clocks, Keyboards, Line graphs, Alarm list, Alarm history (Note 7), Custom parts (messages, lamps, switches)																			
	Other functions	Recipe, Flow display, Write device, Language switching, GT link, Operation security, Data logging, SD recipe (Note 8)																			
	Clock function	Displayed by referencing PLC clock								Provided with a built-in clock. (Can also refer to and display a PLC clock.) (Note 9) *Buy the backup battery (AFPX-BATT).											
	Contrast adjustment	Contrast can be adjusted by using the touch panel.				Unnecessary				Unnecessary											
	Buzzer	_____				Installed															
	Automatic communication settings	The communication speed (baud rate) is automatically changed if there is no response from the target equipment.																			
	Through function	GT connected between PC and PLC allows PLC to be debugged without a direct connection to a PC.																			
	Screen creation	Dedicated software should be used. Applicable OS: Windows® 2000 / XP / Vista / 7 / 8 / 8.1 / 10 (Note 10)																			
Touch key resolution		Free layout (8 dots min.)																			
Touch key operation force		0.8 N or less																			
Touch key life		1 million operations or more (at +25 °C +77 °F)																			
COM. port	Communication standard	Conforms to RS-232C	Conforms to RS-422 / RS-485	Conforms to RS-232C	Conforms to RS-422 / RS-485	Conforms to RS-232C	Conforms to RS-422 / RS-485	Conforms to RS-232C	Conforms to RS-422 / RS-485	Conforms to RS-232C	Conforms to RS-422 / RS-485	Conforms to RS-232C	Conforms to RS-422 / RS-485	Conforms to RS-232C	Conforms to RS-422 / RS-485	Conforms to RS-232C	Conforms to RS-422 / RS-485				
	External communication conditions	Baud rate: 9,600 bps, 19,200 bps, 38,400 bps, 57,600 bps, 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 " PLC COMPATIBILITY TABLE " on p.23 for manufacturers and models.)																			
	Connector	Connector terminal block (8 pins)																			
Screen data transfer interface	Communication standard	USB1.1																			
	Protocol	Our dedicated protocol																			
	Connector	USB Mini-B										USB TYPE-B									
User's memory	Memory	F-ROM																			
	Capacity	704 Kbyte								2 Mbyte				12 Mbyte							
Memory backup	Memory	_____																			
	Backup battery	_____																			
		Lithium battery (replaceable) AFPX-BATT (Does not include with product.) (Note 9)																			

Conformance to the UL / c-UL standards

UL / c-UL file No.	E96300
UL standard No.	UL508

- Notes: 1) **AIG02MQ03D** and **AIG02GQ02D** incorporate ferrite included in our PLC connection cable (**AIGT8142**).
2) This protective structure condition applies to the front surface of the installed panel. This condition does not guarantee usage in all environments provided by users. When reattaching the panel, replace the waterproof packing.
3) The display has been changed STN LCD to TFT LCD from production in February 2017.
4) The display has been changed STN LCD to TFT LCD from production in March 2016.
5) The display has been changed STN LCD to TFT LCD from production in December 2011.
6) The number of screens that can be registered varies according to the registered contents.
7) The alarm history function is not supported for the **GT02L** and **GT02** memory backup not support type.
8) The data logging and SD recipe functions are available with only models equipped with an SD / SDHC memory card slot.
9) Among **GT02** series, available for **GT02M2** and **GT02G2** only.
10) The 64-bit version is not supported except for Windows® 7 / 8 / 8.1 / 10. Windows is registered trademark of Microsoft Corporation in the United States and other countries.

Ramco Innovations www.ramcoi.com **800-328-6236**

Product name		GT703M				GT703G				GT704M			GT704G		GT707	
Item	Type	5 V, RS-232C	5 V, RS-422 / RS-485	24 V, RS-232C	24 V, RS-422 / RS-485	5 V, RS-232C	5 V, RS-422 / RS-485	24 V, RS-232C	24 V, RS-422 / RS-485	24 V, RS-232C	24 V, RS-422 / RS-485	24 V, RS-232C	24 V, RS-422 / RS-485	24 V, RS-232C		
Applicable regulations		CE Marking (EMC Directive, RoHS Directive) (Excluding some models), UKCA Marking (EMC Regulations, RoHS Regulations) (Excluding some models)														
Power supply		5 V DC		24 V DC		5 V DC		24 V DC		24 V DC				24 V DC		
Operating voltage range		4.5 to 5.5 V DC		21.6 to 26.4 V DC		4.5 to 5.5 V DC		21.6 to 26.4 V DC		21.6 to 26.4 V DC				21.6 to 26.4 V DC		
Power consumption		2 W or less (Note 1)		2.4 W or less		2 W or less (Note 1)		2.4 W or less		2.4 W or less				6 W or less		
Power supply unit isolation method		Transformer isolation														
Ambient temperature		0 to +50 °C +32 to +122 °F														
Ambient humidity		20 to 85 % RH (at +25 °C +77 °F) (No dew condensation allowed)														
Storage temperature		-20 to +60°C -4 to +140 °F														
Storage humidity		10 to 85 % RH (at 25°C +77 °F) (No dew condensation allowed)														
Vibration resistance		5 to 8.4 Hz, amplitude 3.5 mm 0.138 in , 8.4 to 150 Hz, acceleration 9.8 m/s ² , 10 sweeps each in X, Y and Z directions (1 octave/min.)														
Shock resistance		147 m/s ² , 3 times in each of the X, Y and Z directions														
Superposed noise suppression		1,000 V [P-P] or more, pulse width of 50 ns, 1 μs between power supply terminals (by a noise simulator)														
Environmental resistance		IP67 (in the initial stages) (Note 2,3)												IP65 (in the initial stages) (Note 2)		
Net weight		180 g approx.						240 g approx.				360 g approx.				
Display	Display device	TFT monochrome LCD						TFT monochrome LCD				TFT color LCD				
	Resolution	480 (W) × 192 (H) dots						640 (W) × 240 (H) dots				800 (W) × 480 (H) dots				
	Display color	2 colors (black / white, 64-gray scale)						2 colors (black / white, 64-gray scale)				65,536 colors				
	Displayable area	88.5 (W) × 35.4 (H) mm 3.484 (W) × 1.394 (H) in						108.8 (W) × 40.8 (H) mm 3.484 (W) × 1.394 (H) in				153.8 (W) × 85.6 (H) mm 6.055 (W) × 3.370 (H) in				
	Backlight	3-color LED (white / pink / red)			3-color LED (green / orange / red)			3-color LED (white / pink / red)		3-color LED (green / orange / red)		White LED				
Functions	Font types	Fixed (GTWIN) : 1/4 width (8 × 8), half width (16 × 8), full width (16 × 16), Characters can be displayed in the 1, 2, 4, 8 or 16 times width or height. True Type (GTWIN): 10 to 192 dots, Windows®: 10 to 240 dots												True Type (GTWIN): 10 to 240 dots, Windows®: 10 to 240 dots		
	Languages	Japanese, English, Simplified Chinese, Traditional Chinese, Korean, German, Italian, Spanish, French, Turkish, Russian, Vietnamese														
	Graphics	Straight lines, Continuous straight lines, Squares, Circles, Arcs, Curves, Fan shapes, Polygons, Fill, Bitmaps														
	Number of screens (Note 4)	250 screens approx.						250 screens approx.				230 screens approx.				
	Screen setting No.	Base screens: No. 0 to 3FF, Key board screens: No. 0 to 7, Login screens: No. 0 to F														
	Part functions	Lamps, Switches, Data, Bar graphs, Clocks, Keyboards, Line graphs, Alarm list, Alarm history														
	Other functions	Recipe, Flow display, Write device, Multiple PLC connection, FP monitor, Multi language exchange, GT link, Operation security, Data logging, SD recipe												Recipe, Flow display, Write device, Multi language exchange, Operation security, Data logging, SD recipe		
	Clock function	Provided with a built-in clock. (Can also refer to and display a PLC clock.) * Buy the backup battery [AFPX-BATT(GT707: AFPABAT001)].														
	Backlight brightness adjustment	Can be set on the menu screen, via the GT configuration screen of GTWIN , or via PLC. (There are some minor variations in the backlight brightness.)														
	Contrast adjustment	Unnecessary														
	Buzzer	Installed														
	Automatic communication settings	The communication speed (baud rate) is automatically changed if there is no response from the target equipment.														
	Through function	GT connected between PC and PLC allows PLC to be debugged without a direct connection to a PC.														
	Screen creation	Dedicated software should be used. Applicable OS: Windows® Vista / 7 / 8 / 8.1 / 10 (Note 5)														
Touch key resolution		Free layout (8 dots min.)														
Touch key operation force		0.8 N or less														
Touch key life		1 million operations or more (at +25 °C +77 °F)														
COM. port	Communication standard	Conforms to RS-232C	Conforms to RS-422 / RS-485	Conforms to RS-232C	Conforms to RS-422 / RS-485	Conforms to RS-232C	Conforms to RS-422 / RS-485	Conforms to RS-232C	Conforms to RS-422 / RS-485	Conforms to RS-232C	Conforms to RS-422 / RS-485	Conforms to RS-232C	Conforms to RS-422 / RS-485	Conforms to RS-232C		
	External communication conditions	Baud rate: 9,600 bps, 19,200 bps, 38,400 bps, 57,600 bps, 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, Modbus RTU mode protocol (Master / Slave) supported and Other companies' PLC supported (Refer to the " PLC COMPATIBILITY TABLE " on p.23 for manufacturers and models.)												Our FP series supported, General-purpose serial interface supported, and Other companies' PLC supported (Refer to the " PLC COMPATIBILITY TABLE " on p.23 for manufacturers and models.)		
	Connector	Connector terminal block (8 pins)												D-SUB connector (9 pins)		
Ethernet port	Interface	100BASE-TX / 10BASE-T														
	Baud rate	100Mbps/10Mbps automatic negotiation (Note 6)														
	Protocol	Our dedicated protocol Our FP series supported, Modbus-TCP supported and Other companies' PLC supported (Mitsubishi Electric MC protocol)														
	Connector	Plug-in phone jack (RJ-45)														
Screen data transfer interface	Communication standard	USB2.0														
	Protocol	Our dedicated protocol														
	Connector	USB Mini-B														
User's memory	Memory	F-ROM														
	Capacity	16 Mbyte												76 Mbyte		
Memory backup	Memory	SRAM														
	Backup battery															

Conformance to the UL / c-UL standards

UL / c-UL file No.	E96300
UL standard No.	UL508

- Notes: 1) Power cannot be supplied from TOOL port of PLC (CPU unit).
2) This protective structure condition applies to the front surface of the installed panel. This condition does not guarantee usage in all environments provided by users.
3) When reattaching the panel, replace the waterproof packing.
4) The number of screens that can be registered varies according to the registered contents.
5) The 64-bit version is not supported except for Windows® 7 / 8 / 8.1 / 10. Windows is registered trademark or trademark of Microsoft Corporation in the United States and other countries.
6) Switching between different speeds is done automatically by auto negotiation function.

GTseries

SPECIFICATIONS

Product name		GT12		GT32M-R		GT32T-R	
Item	Type	RS-232C	RS-422 / RS-485	RS-232C	RS-422 / RS-485	RS-232C	RS-422 / RS-485
Applicable regulations		CE Marking (EMC Directive, RoHS Directive) (Excluding some models), UKCA Marking (EMC Regulations, RoHS Regulations) (Excluding some models)					
Power supply		24 V DC					
Operating voltage range		21.6 to 26.4 V DC					
Power consumption		1.7 W or less		4.8 W or less		7.2 W or less	
Power supply unit isolation method		Transformer isolation					
Ambient temperature		0 to +50 °C +32 to +122 °F					
Ambient humidity		20 to 85 % RH (at +25 °C +77 °F), (No dew condensation allowed)					
Storage temperature		-20 to +60 °C -4 to +140 °F					
Storage humidity		10 to 85 % RH (at +25 °C +77 °F), (No dew condensation allowed)					
Vibration resistance		5 to 9 Hz, amplitude 3.5 mm 0.138 in , 9 to 150 Hz, acceleration 9.8 m/s², 10 sweeps each in X, Y and Z directions (1 octave/min.)		5 to 8.4 Hz, amplitude 3.5 mm 0.138 in , 8.4 to 150 Hz, acceleration 9.8 m/s², 10 sweeps each in X, Y and Z directions (1 octave/min.)			
Shock resistance		147 m/s², 3 times in each of the X, Y and Z directions					
Superposed noise suppression		1,000 V [P-P] or more, pulse width of 50 ns, 1 μs between power supply terminals (by a noise simulator)					
Environmental resistance		IP67 (in the initial stages) (Note 1)		IP67 (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.) (Note 1)			
Net weight		240 g approx.		470 g approx.			
Display	Display device	TFT monochrome LCD (Note 2)		TFT monochrome LCD		TFT color LCD	
	Resolution	320 (W) × 120 (H) dots		320 (W) × 240 (H) dots			
	Display color	2 colors (black / white, 8-gray scale)		2 colors (black / white, 16-gray scale)		4,096 colors	
	Displayable area	108.8 (W) × 40.8 (H) mm 4.283 (W) × 1.606 (H) in		115.2 (W) × 86.4 (H) mm 4.535 (W) × 3.402 (H) in			
	Backlight	GT12M : 3-color LED (white / pink / red) GT12G : 3-color LED (green / orange / red)		White LED			
Functions	Font types	Fixed (GTWIN) : 1/4 width (8 × 8), half width (16 × 8), full width (16 × 16) Characters can be displayed in the 1, 2, 4, or 8 times width or height. True Type (GTWIN): 10 to 120 dots		Fixed (GTWIN) : 1/4 width (8 × 8), half width (16 × 8), full width (16 × 16), Characters can be displayed in the 1, 2, 4, or 8 times width or height. True Type (GTWIN): 10 to 240 dots, Windows®: 10 to 240 dots			
	Languages	Japanese, English, Simplified Chinese, Traditional Chinese, Korean, German, Italian, Spanish, French, Turkish, Russian, Vietnamese					
	Graphics	Straight lines, Continuous straight lines, Squares, Circles, Ovals, Arcs, Elliptic arcs, Fan shapes, Elliptic fan shapes, Beveled squares, Bitmaps					
	Number of screens (Note 3)	2-gray scale: 250 screens approx. 8-gray scale: 200 screens approx.		180 screens approx.			
	Screen setting No.	No. 0 to 3FF		Base screens: No. 0 to 3FF, Key board screens: No. 0 to 7, Login screens: No. 0 to F			
	Part functions	Messages, Lamps, Switches, Function switches, Data, Bar graphs, Clocks, Keyboards, Line graphs, Alarm list, Alarm history, Custom parts (messages, lamps, switches)					
	Other functions	Recipe, Flow display, Write device, Multiple PLC connection, FP monitor, Language switching, GT link, Operation security, Data logging, SD recipe (Note 4)					
	Clock function	Provided with a built-in clock. (Can also refer to and display a PLC clock.) *Buy the backup battery (AFPX-BATT).					
	Contrast adjustment	Unnecessary					
	Buzzer	Installed					
	Automatic communication settings	The communication speed (baud rate) is automatically changed if there is no response from the target equipment.					
	Through 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® 2000 / XP / Vista / 7 / 8 / 8.1 / 10 (Note 5)						
Touch key resolution		Free layout (8 dots min.)					
Touch key operation force		0.8 N or less					
Touch key life		1 million operations or more (at +25 °C +77 °F)					
COM. port	Communication standard	Conforms to RS-232C	Conforms to RS-422 / RS-485	Conforms to RS-232C	Conforms to RS-422 / RS-485	Conforms to RS-232C	Conforms to RS-422 / RS-485
	External communication conditions	Baud rate: 9,600 bps, 19,200 bps, 38,400 bps, 57,600 bps, 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 " PLC COMPATIBILITY TABLE " on p.23 for manufacturers and models.)					
	Connector	Connector terminal block (8 pins)					
Screen data transfer interface	Communication standard	USB1.1					
	Protocol	Our dedicated protocol					
	Connector	USB Mini-B		USB TYPE-B			
User's memory	Memory	F-ROM					
	Capacity	2 Mbyte		12 Mbyte			
Memory backup	Memory	SRAM					
	Backup battery	Lithium battery (replaceable) AFPX-BATT (Does not include with product.)					

Conformance to the UL / c-UL standards

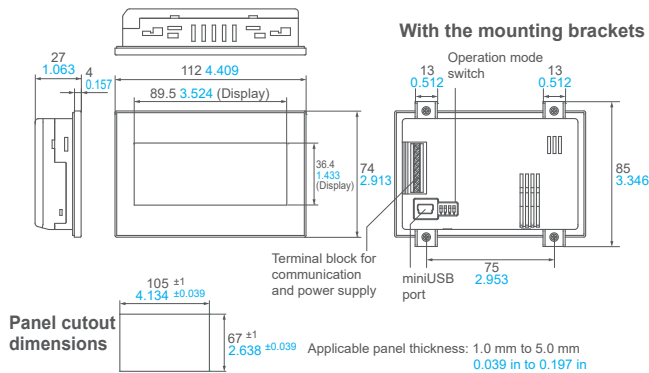
UL / c-UL file No.	E96300
UL standard No.	UL508

- Notes: 1) This protective structure condition applies to the front surface of the installed panel. This condition does not guarantee usage in all environments provided by users. When reattaching the panel, replace the waterproof packing.
2) The display has been changed STN LCD to TFT LCD from production in November 2016.
3) The number of screens that can be registered varies according to the registered contents.
4) The data logging and SD recipe functions are available with only models equipped with an SD / SDHC memory card slot.
5) The 64-bit version is not supported except for Windows® 7 / 8 / 8.1 / 10. Windows is registered trademark of Microsoft Corporation in the United States and other countries.

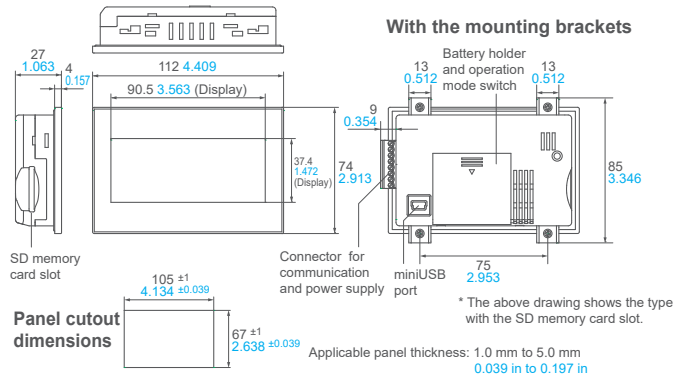
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The CAD data can be downloaded from our website.

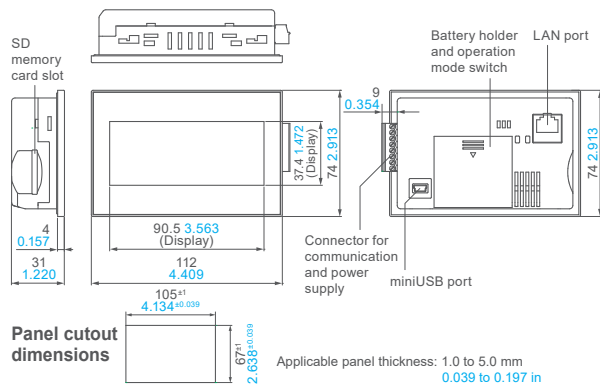
GT02L



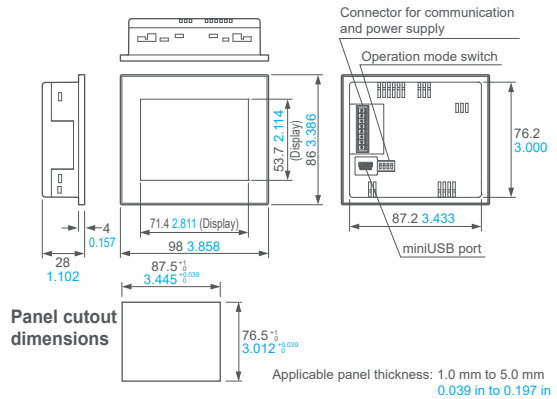
GT02



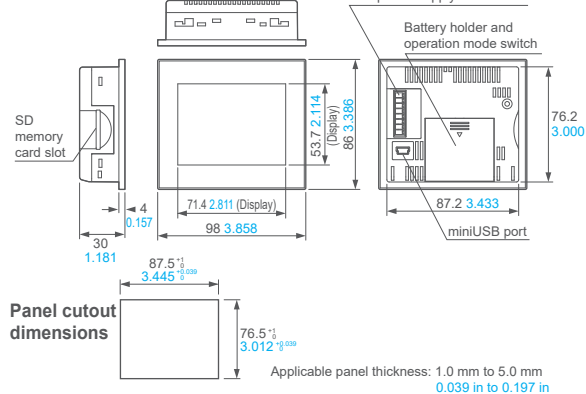
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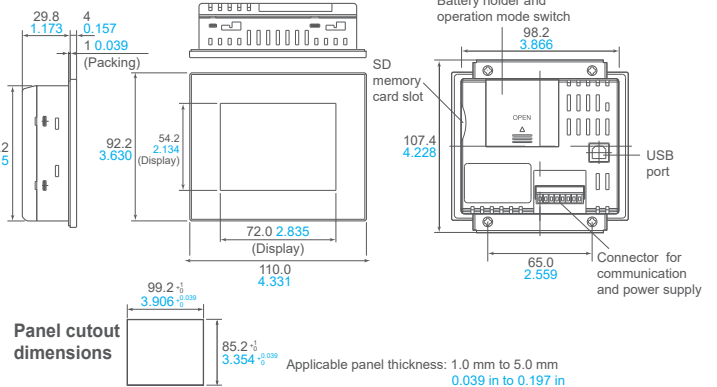
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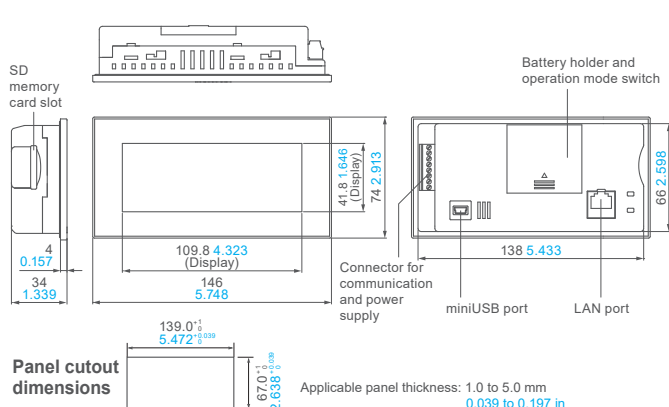
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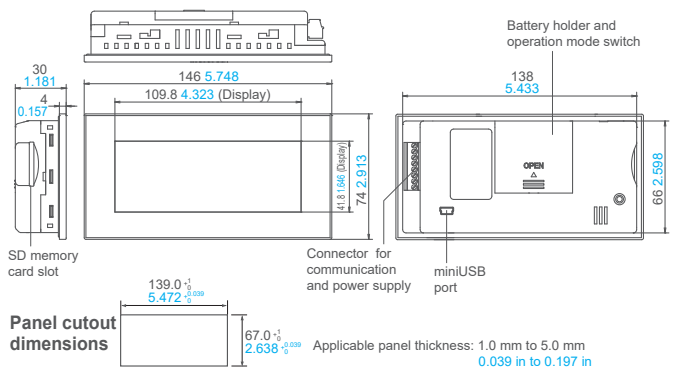
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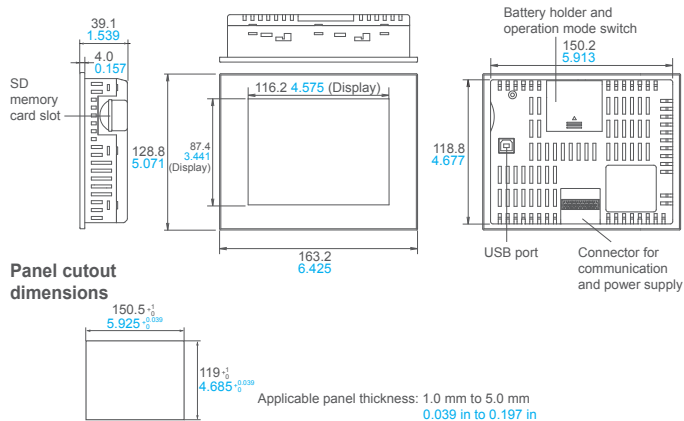
GT704



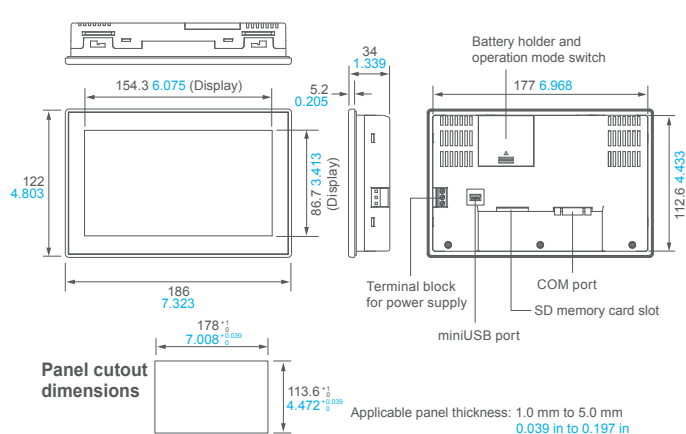
GT12



GT32-E GT32-R



GT707



Panasonic
INDUSTRY

Panasonic Industry Co., Ltd.

Industrial Device Business Division
7-1-1, Morofuku, Daito-shi, Osaka 574-0044, Japan
industrial.panasonic.com/ac/e/

Ramco Innovations www.ramcoi.com 800-328-6236