Panasonic

$C \epsilon$ | ⓒ(UL)us Listing | (K)(GT703/704 only)

High-definition & Tough

Panasonic programmable display support various sites.

High-definition

Highest image quality!

High quality display improves screen readability and overall user experience.

Optimized interface for easier operation!

Capable of displaying 4 times the visible data on one single screen.
Reduce screen hierarchy and simplify use.

3.8 inch monochrome high quality display GT703

4.6 inch monochrome high quality display GT704

Tough **Tough**

Excellent Visibility and Environmental Resistance

High visibility display even in bright environments, it's also compact.
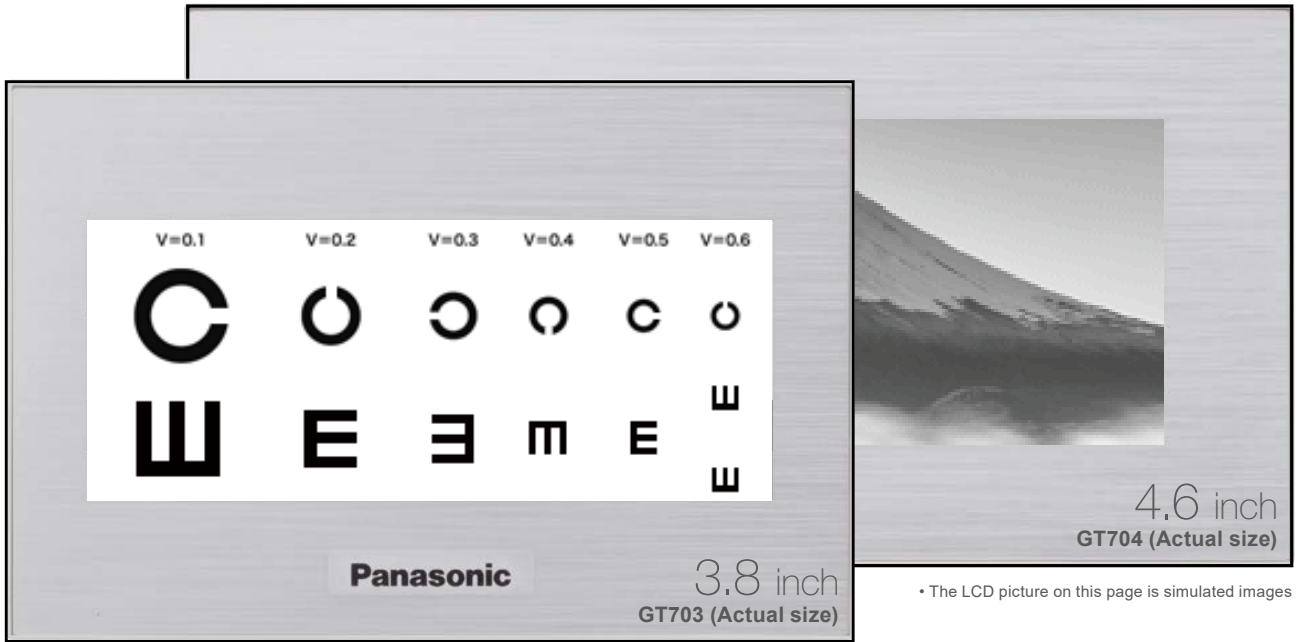The Programmable Display "Tough Model" with excellent environmental resistance

Charging possible
Connect the charge connector to the car and then press the "START" button.
START

3.5 inch Environmentally-resistant Tough model GT03T-E

Charging possible 🏠
Connect the charge connector to the car and then press the "START" button.
START

5.7 inch Environmentally-resistant Tough model GT32T-E

3 Year Warranty

Difference you can see. High-definition model for superior high image quality and easier operation

V=0.1 V=0.2 V=0.3 V=0.4 V=0.5 V=0.6

Panasonic

3.8 inch
GT703 (Actual size)

4.6 inch
GT704 (Actual size)
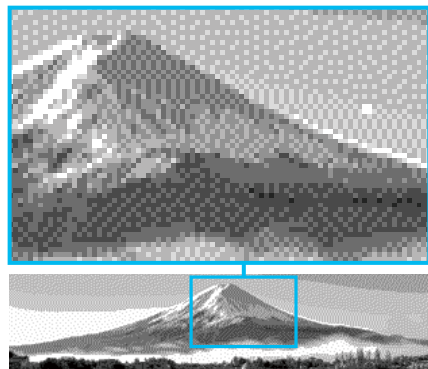
• The LCD picture on this page is simulated images

Common Features for High-definition Model

High quality display improves screen readability and overall user experience.

High image quality

| Outstanding image quality! | Standard displays | [3.8 inch] 240 × 96 dots 2-gray scale [4.6 inch] 320 × 120 dots 8-gray scale | New GT | [GT703] 480 × 192 dots 64-gray scale [GT704] 640 × 240 dots 64-gray scale |

Resolution is four times higher than before.

Capable of displaying 4 times the visible data on one single screen. Reduce screen hierarchy and simplify use.

Optimized interface for easier operation

| 4 times visual performance | Standard displays | 320 × 120 dots | New GT | 320 × 120 dots on a quarter screen |

Data that previously required four screens can now be displayed on one.

GTseries
Programmable Display

GTseries
Programmable Display

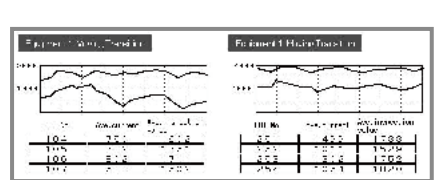| No need to switch screens! | Standard displays | Switching between four screens | New GT | Four screens displayed on a single screen |
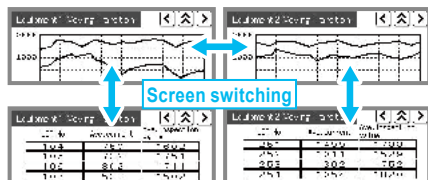
**Simplify screen hierarchy to improve operation efficiency.
Reduce labor time lost to screen refreshing.**

Screen switching

2

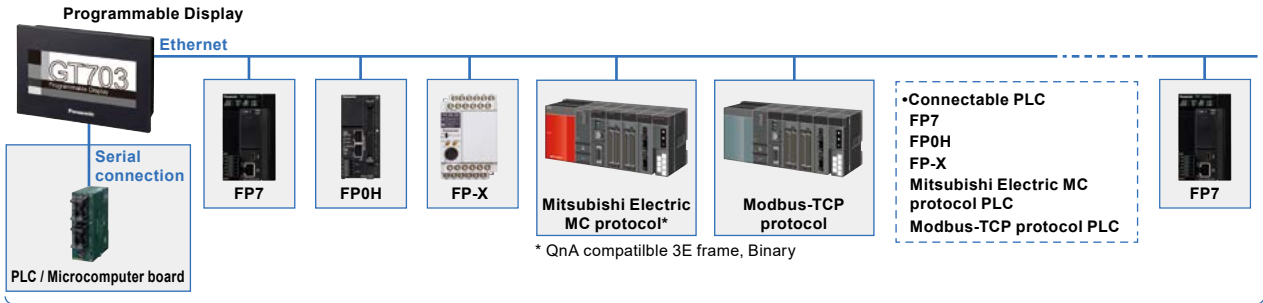# Connect up to 64 PLC units (our PLCs or other company's PLCs) via Ethernet

In addition to our PLC, Mitsubishi Electric MC protocol and Modbus-TCP protocol are also supported.
Also with COM. port (serial connection), connection up to 4 protocols / 64 PLCs is possible.
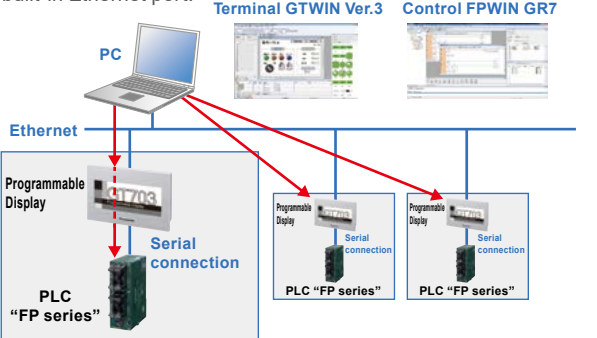
Programmable Display

Ethernet

GT703

Serial connection

PLC / Microcomputer board

FP7 FP0H FP-X

Mitsubishi Electric MC protocol*

Modbus-TCP protocol

•**Connectable PLC**
FP7
FP0H
FP-X
Mitsubishi Electric MC protocol PLC
Modbus-TCP protocol PLC

FP7

* QnA compatilble 3E frame, Binary

Connection up to 4 protocols / 64 PLCs is possible.

Screens & PLC program can be edited via Ethernet. (pass through capability)

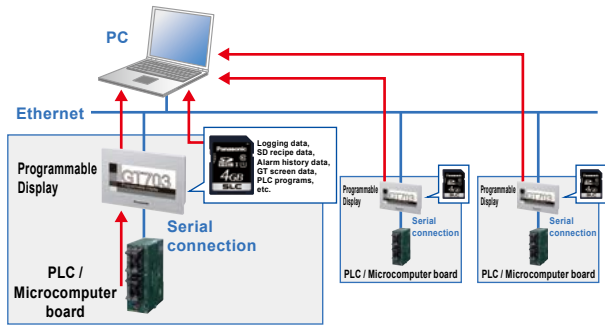**Multiple programmable displays and PLC units can be edited via Ethernet.**

Besides being able to update the firmware and transfer screen data using **GTWIN**, it is now possible to use **FPWIN** to edit our "**FP series**" PLC programming directly through the programmable displays by using the built-in Ethernet port.

Ethernet (LAN) port

Terminal GTWIN Ver.3   Control FPWIN GR7

PC

Ethernet

Programmable Display   GT703

Serial connection

PLC "FP series"

Programmable Display
Serial connection
PLC "FP series"

Programmable Display
Serial connection
PLC "FP series"

FTP(S) server function* to easily acquire data from SD memory card port. * Supports SSL / TLS.

**Information from multiple devices can be linked to IoT.**

Information from SD memory card can be transferred to a single host PC via Ethernet.

PC

Ethernet

Programmable Display   GT703

Logging data, SD recipe data, Alarm history data, GT screen data, PLC programs, etc.

Serial connection

PLC / Microcomputer board

Programmable Display
Serial connection
PLC / Microcomputer board

Programmable Display
Serial connection
PLC / Microcomputer board

Confirm PLC wiring and operation status simply and efficiently!

Whether the PLC is installed inside the equipment where it is not visible or in a remote location you can still monitor PLC input/output status

With simply drag and drop functionality, from PLC templates found in the parts library registered in **GTWIN**, you can easily verify the wiring and operation status.

FP0R

Light ON

See indicators displayed as is!
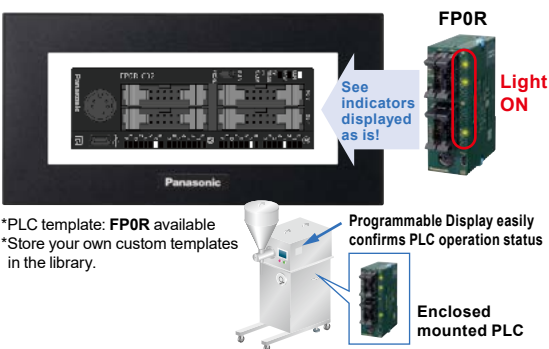
*PLC template: **FP0R** available
*Store your own custom templates in the library.

Programmable Display easily confirms PLC operation status

Enclosed mounted PLC

## Device monitor function shows PLC status without a PC

You can directly monitor multiple PLC devices from the programmable display without having to use a PC (**FPWIN GR** / **FPWIN GR7**). The device monitor can be accessed from the system menu, eliminating the need to create additional screens.

Device information

Programmable Display   Our PLC

■ Easy Monitor

DT   100   Up   Down

200

▲   US1   ▼

RUN   PROG
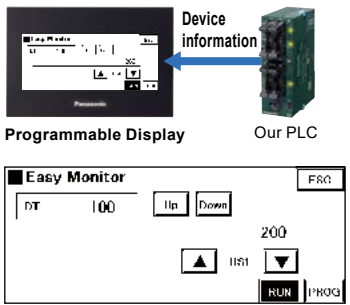
*Does not apply to **FP7**

Battery free Data backup

By eliminating the battery routine equipment maintenance can be reduced. You can also turn off the power to save energy without hesitation.

Battery

○: Available
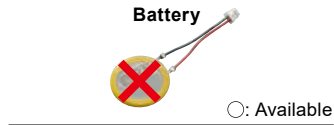
Item	Without battery	With battery
Device maintenance (Note)	○	○
Calendar timer operation	—	○

Note: With PLC devices, up to 24 words can be displayed.

GT703

Programmable Display

Difference you can see.
High image quality and easier operation!

3.8 inch CE c UL us KC

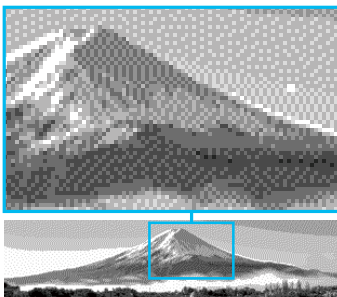Pure black

Silver

GT703G

GT703M

74 mm
2.913 in

112 mm
4.409 in

High quality display improves screen readability and overall user experience.

Resolution is four times higher than before.

| Standard displays | 240 × 96 dots 2-gray scale |
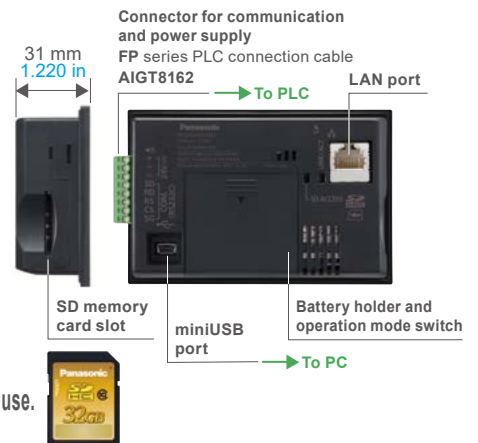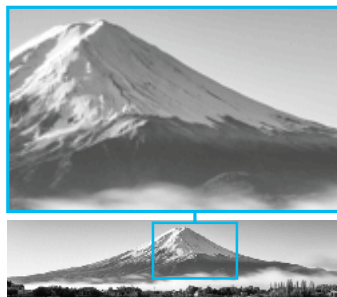
Outstanding image quality!

| GT703 | 480 × 192 dots 64-gray scale |

Connector for communication
and power supply
FP series PLC connection cable
AIGT8162

31 mm
1.220 in

→ **To PLC**

LAN port

**SD memory
card slot**

**miniUSB
port**

**Battery holder and
operation mode switch**

→ **To PC**

Capable of displaying 4 times the visible data on one single screen. Reduce screen hierarchy and simplify use.

Data that previously required four screens can now be displayed on one. **4 times visual performance**

| Standard displays | 240 × 96 dots |

| GT703 | 240 × 96 dots on a quarter screen |

Connect up to 64 PLC units (our PLCs or other company's PLCs) via Ethernet

In addition to our PLC, Mitsubishi Electric MC protocol and Modbus-TCP protocol are also supported.
Also with COM. port (serial connection), connection up to 4 protocols / 64 PLCs is possible.

Ethernet

Programmable Display

**Serial
connection**

PLC / Microcomputer board

FP7 **FP0H** **FP-X**

**Mitsubishi Electric
MC protocol***

**Modbus-TCP
protocol**

* QnA compatilble 3E frame, Binary

•**Connectable PLC
FP7
FP0H
FP-X
Mitsubishi Electric MC
protocol PLC
Modbus-TCP protocol PLC**

FP7

Connection up to 4 protocols / 64 PLCs is possible.

| 3.8 inch | TFT monochrome (white / black) | 3-color LED (white / pink / red) (green / orange / red) | 48 chars. × 19 lines (10-dot font) | 480 × 192 dots | mini USB | SD HC | Portrait | IP67 | 5 V DC / 24 V DC |

• The LCD picture on this page is simulated images
• The panel face protection sheet for the **GT** series is available as an option.

4

GT704

Programmable Display

Difference you can see.
High image quality and easier operation!

4.6 inch CE cULus KC

High image quality model

Pure black

GT704G

Silver

74 mm
2.913 in

GT704M

146 mm
5.748 in

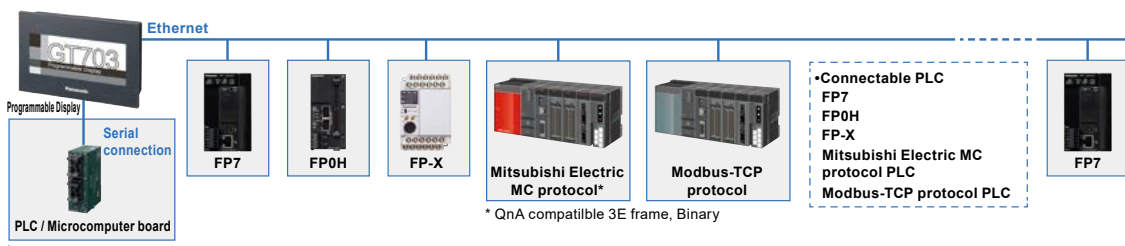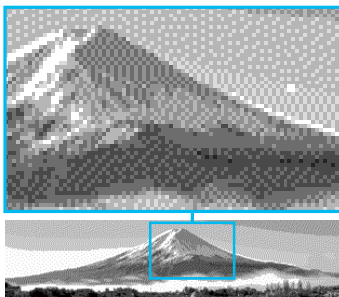## High quality display improves screen readability and overall user experience.
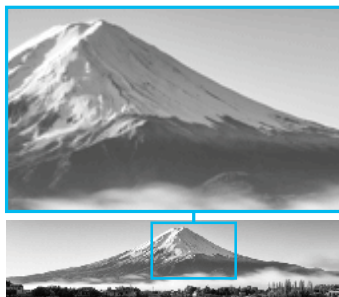
Resolution is four times higher than before.

Outstanding image quality!

| Standard displays | 320 × 120 dots 8-gray scale |

| GT704 | 640 × 240 dots 64-gray scale |

34 mm
1.339 in

Connector for communication and power supply
FP series PLC connection cable
AIGT8162 → To PLC

Battery holder and operation mode switch

SD memory card slot

miniUSB port

→ To PC

LAN port

Capable of displaying 4 times the visible data on one single screen. Reduce screen hierarchy and simplify use.
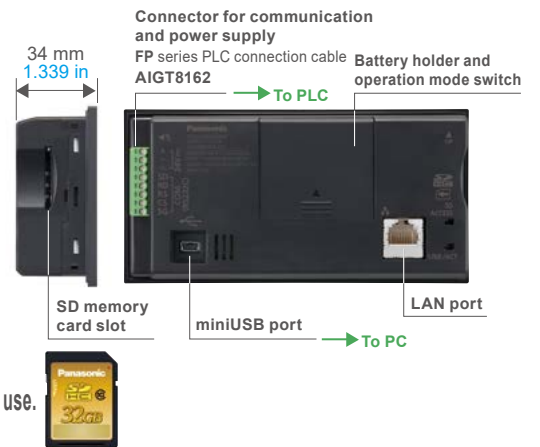
Data that previously required four screens can now be displayed on one. **4 times visual performance**
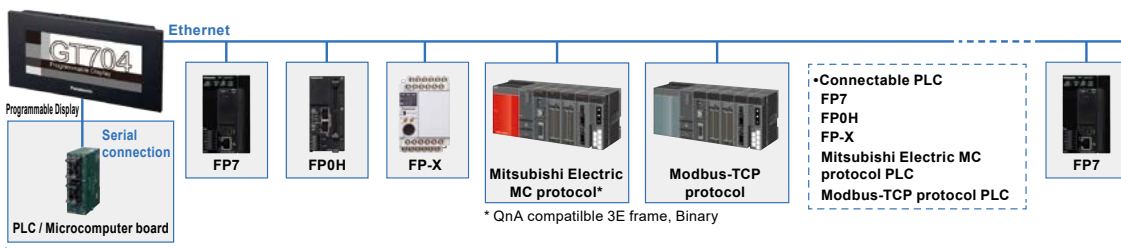
| Standard displays | 320 × 120 dots |

| GT704 | 320 × 120 dots on a quarter screen |

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In addition to our PLC, Mitsubishi Electric MC protocol and Modbus-TCP protocol are also supported.
Also with COM. port (serial connection), connection up to 4 protocols / 64 PLCs is possible.

Ethernet

Serial connection

PLC / Microcomputer board

FP7

FP0H

FP-X

Mitsubishi Electric MC protocol*

Modbus-TCP protocol

*Connectable PLC
FP7
FP0H
FP-X
Mitsubishi Electric MC protocol PLC
Modbus-TCP protocol PLC

FP7

* QnA compatilble 3E frame, Binary

Connection up to 4 protocols / 64 PLCs is possible.

| 4.6 inch | TFT monochrome (white / black) | 3-color LED (white / pink / red) (green / orange / red) | 64 chars. × 24 lines (10-dot font) | 640 × 240 dots | mini USB | SD HC | Portrait | IP67 | 24 V DC |

• The LCD picture on this page is simulated images
• The panel face protection sheet for the **GT** series is available as an option.

5

GT [Tough] Model with Excellent Environmental Resistance

Charging possible

Connect the charge connector to the car and then press the "START" button.

START

3.5 inch
GT03T-E (Actual size)

5.7 inch
GT32T-E (Actual size)

• The LCD picture on this page is simulated images.
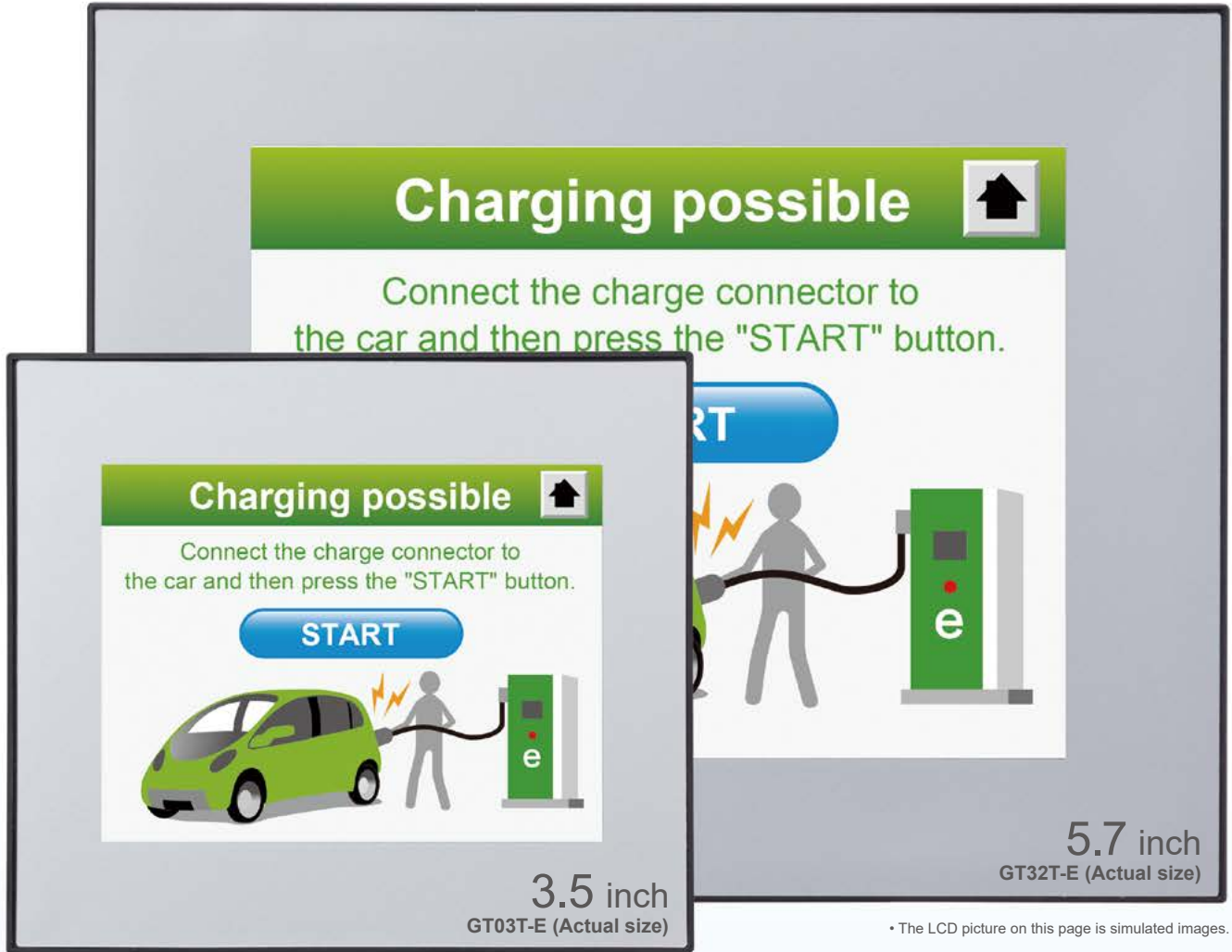
−20 to +60°C
−4 to +140°F

The wide operating temperature range allows for use in various environments.
-20 to +55 ℃ -4 to +131 ℉ when horizontally installed, vertically installed in a portrait orientation, upside down installed and when using battery.

UV Reduction

Resistant to UV Rays!
The two-layer front protection sheet deduces UV rays in two-stage.

IP67

High waterproof performance allows for use in environments exposed to splashing water.
The front panel has a protective structure rated IP67.

Low power consumption

Color type (GT03T-E): 3.1 W or less
Monochrome type (GT03M-E): 1.9 W or less
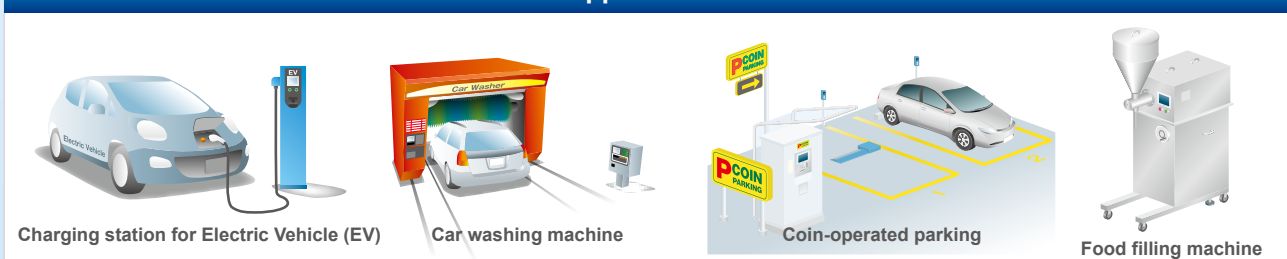
Improved visibility

High visibility display even in bright environments!
High in brightness and contrast and anti-glare coating provides exceptional viewing characteristics.
Monochrome type uses a TFT LCD that's bright and uses deep black for great visibility.

High-definition

Same resolution [320 (W) × 240 (H) dots] as the 5.7 inch model (GT32-E) GT03-E
Screen data of GT32-E can be used on the smaller display.

Smallest

The smallest class body among 3.5 inch screen GT03-E

See page 8 for details. ▶

Applications

Charging station for Electric Vehicle (EV) **Car washing machine** **Coin-operated parking** **Food filling machine**

Superior visibility even in sunlight

Color type

Tough model GT32T-E   Conventional model

**Monochrome type**

Tough model GT32M-E   Conventional model

- **High contrast TFT LCD:** Achieved higher contrast and visibility.
- **High brightness backlight:** Achieved greater brightness and visibility than the conventional model.

The monochrome type, in particular, is greater brightness than the conventional model and is way easier to view in bright environments thanks to the "deep black".

Anti-glare, High visibility display

- **A front protection layer has an anti-glare coating to prevent unwanted reflections**

(Fingerprints are made less noticeable even in outdoor use)
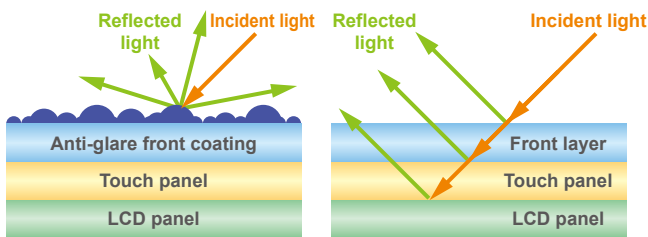
Anti-glare front coating   No anti-glare front coating

Comparison of reflection

Tough model GT32T-E   Conventional model

No risk of product deterioration due to UV exposure

- **The front sheet is made of a material that does not transmit UV rays.**
- **A combination of a UV cutting layer and a UV absorbing layer performs two-stage UV blocking.**
  The LCD and touch panel can be protected from deterioration.

■ **UV ray transmittance performance**
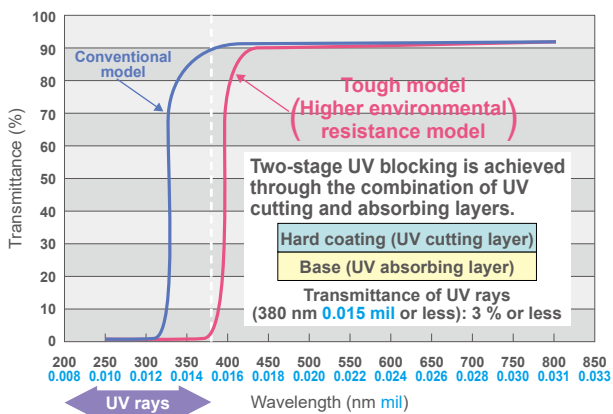
- The LCD images on this page are actual photographs.

Excellent water resistance

- **The front panel has a protective structure rated IP67.**
  Safe to use outdoors or in a location exposed to splashing water.
- **Added protection has been applied to the rear of the unit for a more rugged overall construction.**

Wide operating temperature range

- **Usable in a range of -20 °C to +60 °C -4 °F to +140 °F**
  -20 °C to +55 °C -4 °F to +131 °F when horizontally installed, vertically installed in a portrait orientation, upside down installed and when using battery.
- **The TFT LCD can quickly switch screens even at a low temperature.**
- **The life of the LED backlight does not decrease even at a low power consumption.**
- **It is not necessary to prepare a heater for use at a low temperature.**

Reduced power consumption

- **Compact color type (GT03T-E): 3.1 W or less**
- **Compact monochrome type (GT03M-E): 1.9 W or less**
- **Color type (GT32T-E): 7.2 W or less**
- **Monochrome type (GT32M-E): 4.8 W or less**

GT03-E

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 CE c(UL)us

Tough model

Silver

Silver

86 mm
3.386 in

98 mm
3.858 in

GT03T-E

GT03M-E

GT03T-E

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.
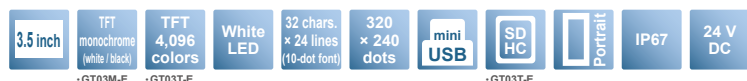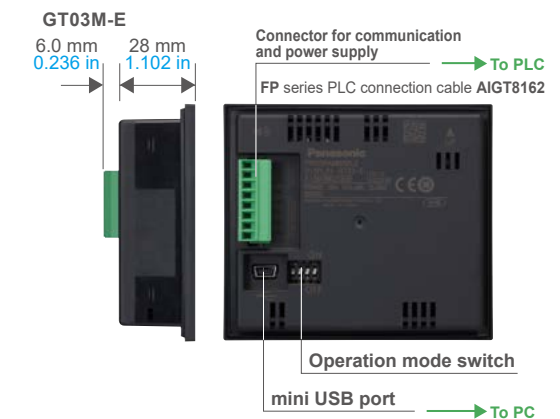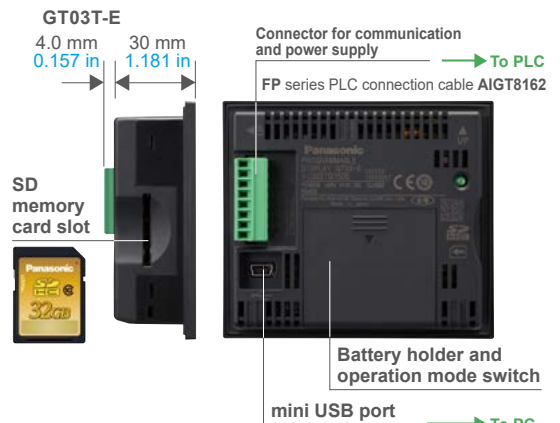
UV resistant, anti-glare front panel

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.

GT03T-E

4.0 mm
0.157 in

30 mm
1.181 in

Connector for communication and power supply → To PLC

FP series PLC connection cable **AIGT8162**

SD memory card slot

Battery holder and operation mode switch

mini USB port → To PC

GT03M-E

6.0 mm
0.236 in

28 mm
1.102 in

Connector for communication and power supply → To PLC

FP series PLC connection cable **AIGT8162**

Operation mode switch

mini USB port → To PC

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

·GT03T-E

GT32-E

Tough

Programmable Display

Outdoor use made possible by significantly improved environmental resistance and visibility

5.7 inch CE c(UL)us

Tough model

Silver

Silver

GT32T-E

GT32M-E

128.8 mm
5.071 in

163.2 mm
6.425 in

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.
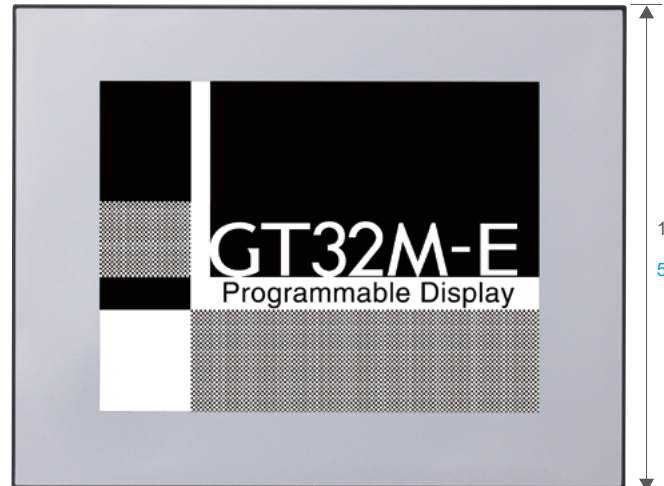
Integrated USB Interface
You can connect your PC and **GT32-E** using your USB cable to transfer screen data.
When used with our **FP** series PLC, this display supports the pass through function, which allows simultaneous debugging of the PLC and the display.

Transformer-isolated power supply
The isolated power supply enhances the reliability.

39.1 mm
1.539 in

1.5 mm
0.059 in

Battery holder and operation mode switch

SD memory card slot

To PC ←

To PLC ←

USB port

Connector for communication and power supply

FP series PLC connection cable **AIGT8162**

5.7 inch | TFT monochrome (white / black) ·GT32M-E | TFT 4,096 colors ·GT32T-E | White LED | 32 chars. × 24 lines (10-dot font) | 320 × 240 dots | USB | SD HC | Portrait | IP67 | 24 V DC
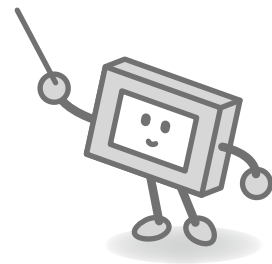
9
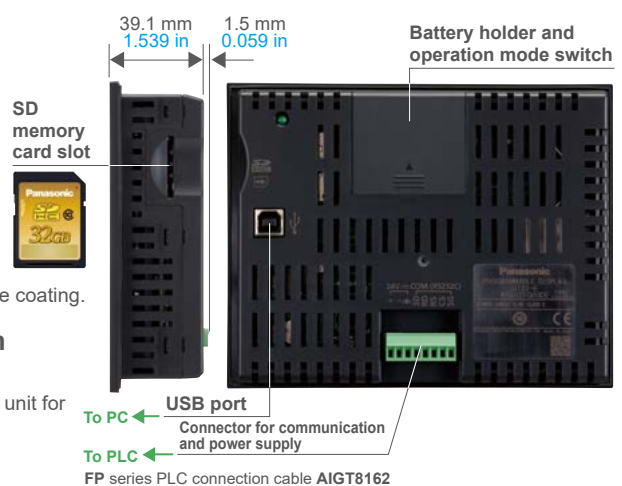
SD Solutions only Panasonic can provide

Links and expansion via SD

As small-size touch panels have significantly improved their image quality,

easy to read displays with sharp characters are no longer special features these days.

Instead, programmable displays will evolve with maximum "user-friendliness"

in various applications with PCs or other devices.

As shown below, our touch panels exchange and store data using SD memory card,

data for many applications.

Image Processing Device

PLC (FP7)

SD Solutions

Eco-POWER METER

Touch panel

PLC

GT03T-E

Data Logger

Industrial grade SD memory cards
Panasonic offers high-reliability industrial SD memory cards.

Links via SD

▶▶ SD recipe function (Data table management)
▶▶ Transfer of PLC program data

Expansion via SD

▶▶ Saving alarm history data on an SD
▶▶ Logging function
▶▶ Display of graphs of stored data

PLC program transfer without the use of a PC

It is possible to modify PLC ladder programs as well as the **GT** screen programs by using an SD / SDHC memory card.
SD / SDHC memory card enables everyone to easily modify programs.

SD Solutions

SD / SDHC memory card ▶▶▶▶▶ GT series ▶▶▶▶▶ PLC
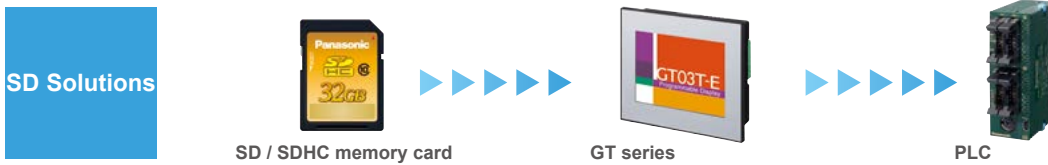
SD memory card data transfer function

Log and other data saved on a SD memory card inserted into the **GT**'s onboard SD memory card slot can now be sent to a PC using a USB connection.

SD / SDHC memory card ▶▶▶▶▶ GT series ▶▶▶▶▶ PC

GT_SD_Reader software must be installed in order to read from the USB port. This software is installed simultaneously with **Terminal GTWIN**.
For **GT703 / GT704**, data can be read from the Ethernet port using FTP client software on a PC. In order to do this, the FTP server function setting is required on the **GT** unit beforehand.

## SD logging function to produce data "Visualization"

Capable of automatically collecting electrical power readings of Eco-POWER METERS and displaying them in a real time graph, allowing users to take quick actions for solutions.

● The **GT** unit can collect data, such as electrical power on an SD / SDHC memory card, and display the log data in a real time graph.
   You can make data "Visualization" without using a PC as a display or Data logger for collecting data.
● One bar graph has a maximum of eight bars and can be combined with line graphs.
● The following three conditions can be selected to trigger an operation to save log data.
   (1) Specified time (2) Specified cycle (1 sec. to 24 hrs.) (3) Specified condition
● Large volumes of data can be saved on an SD / SDHC memory card, which can be carried with you.

Data collection and graph creation

SD recipe function

For high-mix production, recipe data up to 64 types and 4,096 devices in total, can be easily set on a PC. The created recipe data is saved on an SD / SDHC memory card, and the specified data can be written or read from a PLC.

Write and Read

GT series

PLC built-in memory

Product A

SD / SDHC memory card

Product A Product B
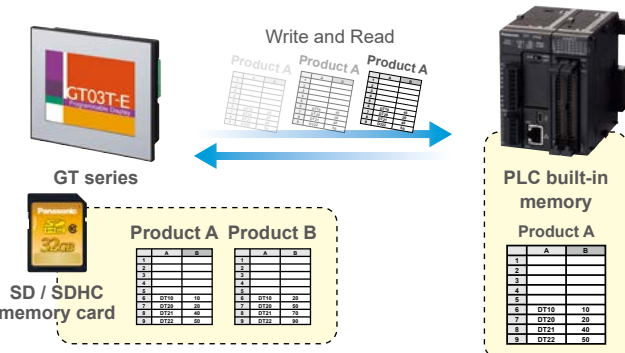
Saving alarm history data on an SD / SDHC memory card

The alarm history data stored in the **GT** built-in memory can be saved on an SD / SDHC memory card, making it possible to easily control problems on a PC.

SD / SDHC memory card   PC

● The LCD images on this page are composites.

11
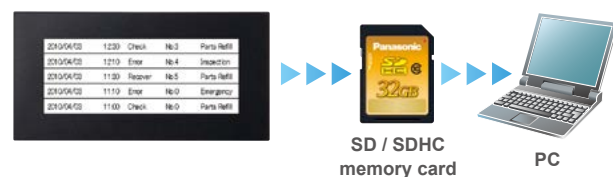
High Visibility and Excellent Operability

Three-color LED backlights allows for checking machine status at a glance
(GT02M / GT02G / GT703M / GT703G / GT05M / GT05G / GT12M / GT12G / GT704M / GT704G)

The monochrome display* has a three-color LED backlight. It allows operators to check the equipment status at a glance by changing the background color.
Example: green under normal conditions, orange during operation, and red in emergency situations.
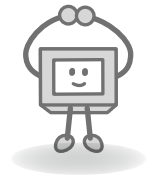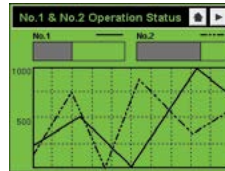
* Excluding **GT03M-E, GT32M-E, GT32M-R** and **GT02L**

GT05G

(Normal)

GT12G
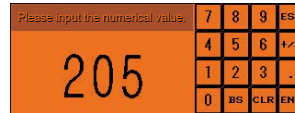
(In operation)

GT02G

(Emergency)

Highly flexible screen design!

GT series displays use an analog-touch panel where locations of parts and characters can be adjusted in increments of one dot. The adoption of the Windows® font has widened the character size selection (10 to 240 dots), making the screen design more flexible. *The maximum size varies depending on the model.

"Analog-touch design"
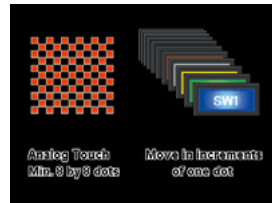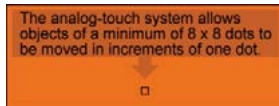
"TrueType fonts"

The adoption of the Windows® font has made it possible to choose a font focusing on the screen image and visual quality.

Graph function

One bar graph has a maximum of eight bars and can be combined with line graphs.
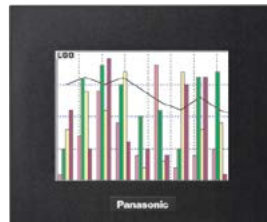
Flow display function

A flowing message of up to 64 characters (two-byte) can be displayed at the bottom of the screen. (128 messages)

Portrait display ideal for narrow spaces

The unit can display screens in portrait orientation and can therefore be installed in narrow spaces, expanding system design possibilities and contributing to size reduction. The portrait display is also ideal for slim equipment without enough space to install a display.

Multi-function switches

Multiple operations are possible. For example, screens can be switched by setting multiple values.

4,096-color parts libraries
(GT05S / GT32T-R / GT03T-E / GT32T-E)

3D-design buttons with higher visibility and operability are available.
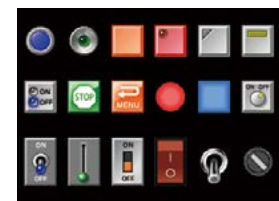
● The LCD images on this page are composites.

Advanced Functions to Enhance Work Efficiency
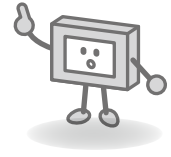
FP monitoring function (FP2SH / FP0R / FP-Σ / FP-X / FP-X0 / FP-e)

*Excluding **FP7**

Five convenient features of GT series for improved compatibility with our FP series of PLCs

1 **Device monitor (Display and change values of FP series devices. Three different modes available.)**
(1) Easy monitor mode: Use this mode when you want to monitor something. Display is continuous when one device is specified and the device can be changed.
(2) Entry monitor mode: Use this mode when you want to monitor multiple devices. You can register devices you want to display one-by-one and you can change them.
(3) Forced on / off mode: Use this mode feature to forcibly turn output on and off. You can set devices one-by-one for which you want to control output.

2 **System register monitor (Display and change of system register values.)**
You can specify the system register number, display the value, and change it.

3 **Shared memory monitor (Display shared memory values.)**
You can specify the slot number, bank number and address, and display the value. You cannot change the value.

**4** **Error monitor (Display an error occurring in the FP series PLC.)**
You can display the self-diagnostic result, error code and error flag, and you can even clear the error.

5 **Password setting (Set the password to protect FP series program reading and writing functions.)**
Password registration and clearing is possible for the **FP** series password protection function.

Device information

Monitor   PLC
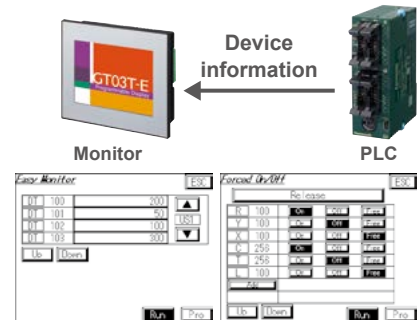
Multiple GT displays can be connected to our FP series PLC. (RS-485 type)

GT link function

Up to 32 **GT** displays can be connected to one PLC unit without communication programs. The same screen operation is possible at a conveyor line or other remote locations, and the number of PLC units can be reduced, cutting the production process costs.

Up to 32 displays can be connected. (Note 1, 2)
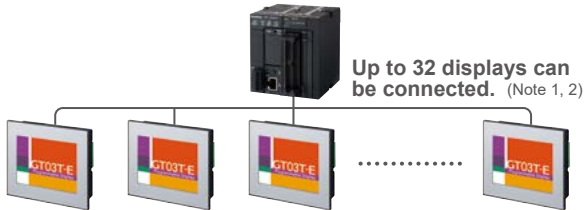
Notes: 1) As the number of connected units increases, the response slows down. Check the speed in the actual line.
2) The response time becomes relatively longer than those in the case of one-to-one connection. Please evaluate whether a sufficient performance can be obtained in designing the system.

Connectivity with multiple PLCs

Up to 31 PLC units can be connected to one **GT** unit. Progress in multiple production lines can be centrally monitored and controlled via one **GT** unit.

Up to 31 units can be connected. (Note 2)

(Note 1)
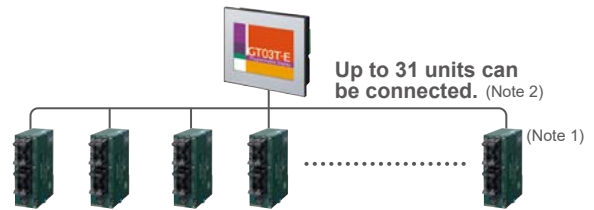
Notes: 1) This function cannot be used for a data link between PLCs.
2) The response time becomes relatively longer than those in the case of one-to-one connection. Please evaluate whether a sufficient performance can be obtained in designing the system.

Enhanced security with password protection

Password protection and operation security functions protect the data asset in the display unit and control the authorization for operation.

Password protection function

The screen data upload operation can be restricted by using passwords to protect the data asset in the display unit.

Operation security function

Up to 64 operators can set individual passwords, and up to 16 levels of restrictions can be set on displays and operations for each part. The registered users and passwords can be changed on the display unit.

High-efficiency operation with through function

This function allows operators to simultaneously carry out the transfer of screen data of a **GT** series display and the debugging of our **FP** series PLC connected to the display.

Easy-to-switch language

Conventionally, screens were created for each language. With this new language switching function, data can be registered in multiple languages (up to 16) for each part. The characters can be easily edited with Microsoft® Excel® and then imported.

		Japanese	English	Simplified Chinese	Traditional Chinese	Korean
000	SW0	日本語	English	简体中国语	繁體中國語	한국어
000	SW0	ありがとうございました	Thank you	热烈欢迎	請多指教	안녕하세
000	SW1	1	1	1	1	1
000	SW1	2	2	2	2	2

Write device function

This function modifies the PLC data or turns bits on / off according to the PLC status or the screen No. Now four arithmetic operations between devices are also possible.

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GT series

	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 P.8 GT03M-E	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)	—
GT03T-E	24 V DC	3.5 inch	TFT color LCD	4,096 colors	320(W) × 240(H) dots	White LED	768 characters	12 Mbyte	○ (mini)	○
GT32-E P.9 GT32M-E	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-E	24 V DC	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** P.4 GT703M GT703G	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 P.5 GT704M GT704G	24 V DC	4.6 inch	TFT monochrome LCD	2 colors (black / white) (64-gray scale)	640(W) × 240(H) dots	GT704M: 3-color LED (white / pink / red) GT704G: 3-color LED (green / orange / red)	1,536 characters	16 Mbyte	○ (mini)	○
General-purpose model **GT02** P.18 GT02M GT02G	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 P.19 GT12G GT12M	24 V DC	4.6 inch	TFT monochrome LCD	2 colors (black / white) (8-gray scale)	320(W) × 120(H) dots	GT12M: 3-color LED (white / pink / red) GT12G: 3-color LED (green / orange / red)	384 characters	2 Mbyte	○ (mini)	○ AIG12MQ1∗D and AIG12GQ1∗D only
GT05 P.20 GT05M GT05G	**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**									
	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

		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.

Tough The products "Tough model" with this mark provide high visibility display even in bright environments and are designed with excellent environmental resistance.

Choose by price

GT05S

Tough GT03T-E

High image quality GT704M / GT704G

GT32T-R

Tough GT32T-E

Entry-level model GT707

GT05M / GT05G

Tough GT03M-E

High image quality GT703M / GT703G

GT12

Tough GT32M-R

Tough GT32M-E

Entry-level model GT02L

GT02

| 3.5 inch | 4.6 inch | 5.7 inch | 7.0 inch |

Choose by screen size

GT707

Programmable Display

Wide screen, small body
7 inch widescreen in space of a 5.7 inch!

7 inch Widescreen C E c UL us

Black

GT707

186 mm
7.323 in

122 mm
4.803 in

7 inch type can be placed in the space of a 5.7 inch type.

Since 7 inch type can fit in a 5.7 inch type space, the screen shows more and the product looks greater.

Usable screen comparison

Shows much more!

Conventional model 5.7 inch
GT32T-R
Screen dimensions:
W115.2 × H86.4 mm
W4.535 × H3.402 in

NEW 7 inch
GT707
Screen dimensions:
W153.8 × H85.6 mm
W6.055 × H3.370 in

Resolution:
800 × 480 dots

5 times over previous

Display color:
65,536 colors

16 times over previous

7 inch, 65,536 colors TFT color LCD equipped with long life LED backlight

Easy-to-view screen thanks to use of a TFT LCD with contrast ratio of 500 : 1.

Built-in SD / SDHC memory card slot

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

Device monitor shows PLC status without a PC

You can directly check PLC devices from the Programmable Display without having to use a PC (**FPWIN GR** / **FPWIN GR7**).
The device monitor is easily viewed from the system menu, which eliminates the bother of screen creation.

Device information

Our PLC

*Except **FP7**

Confirm PLC wiring and operation status simply and efficiently!

Whether the PLC is installed inside the equipment where it is not visible or in a remote location you can still monitor PLC input/output status.
With simply drag and drop functionality, from PLC templates found in the parts library registered in **GTWIN**, you can easily verify the wiring and operation status.

Transfer programs from Programmable Display to PLC

Transfer of PLC ladder programs and Programmable Display screen data is possible from a SD memory card without using a PC.
Also, PLC ladder programs and Programmable Display screen data can be backed up inside the Programmable Display and restored at any time.

Slim frame and body

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

Integrated USB Interface

You can connect your PC and **GT707** 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.

Battery holder and operation mode switch

Terminal block for power supply

COM. port

To PLC

SD memory card slot

FP series PLC connection cable
AFC8503(S)

miniUSB port

To PC

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

7 inch Width	TFT 65,536 colors	White LED	40 chars. × 15 lines (32-dot font)	800 × 480 dots	mini USB	SD HC	Portrait	IP65	24 V DC

GT02L

Programmable Display

Entry-level Model Touch Panel

3.7 inch CE cULus

Black

74 mm
2.913 in

112 mm
4.409 in

For replacing your touch panel

Contributes to the miniaturization of control panels.

For replacement of your membrane-type switch panel
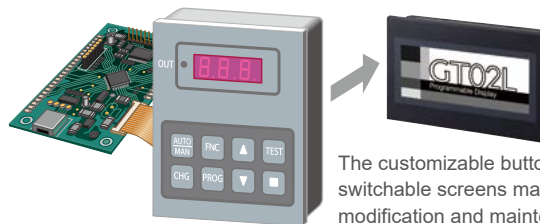
The customizable button layout and switchable screens make design modification and maintenance easier.

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.

Terminal block for communication and power supply

Operation mode switch

To PLC
FP series PLC connection cable **AIGT8142**

miniUSB port

To PC

3.7 inch	STN monochrome (white/black)	White LED	16 chars. × 6 lines (10-dot font)	160 × 64 dots	mini USB	Portrait	IP65	5 V DC

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

● The LCD images on this page are composites.

GT02

Programmable Display

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

3.8 inch   CE   c(UL)us

Pure black

Hairline silver

GT02G

GT02M

74 mm
2.913 in

112 mm
4.409 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.

| White | ⟷ | Pink | ⟷ | Red | (M type) |

| Green | ⟷ | Orange | ⟷ | Red | (G type) |

27 mm
1.063 in

Connector for
communication
and power supply

Battery holder and
operation mode switch

To PLC
FP series PLC
connection cable
AIGT8162 and
AIGT8142

SD
memory
card slot

miniUSB port

To PC
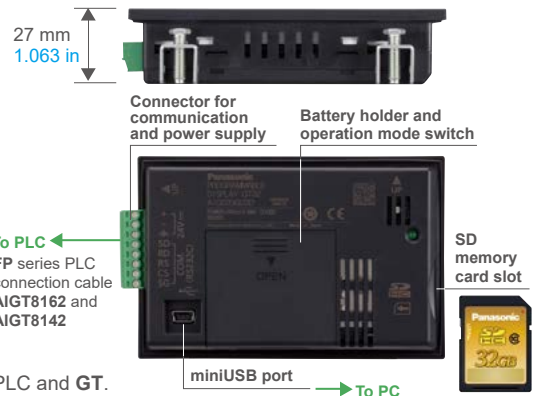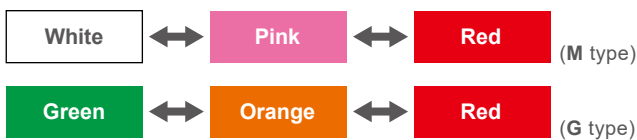
SD / SDHC memory card slot as equipment*1

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.

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.

Water
refreshing

Application example:
Water purifier

| 3.8 inch | TFT monochrome (white/black) | 3-color LED (white/pink/red) (green/orange/red) | 24 chars. × 9 lines (10-dot font) | 240 × 96 dots | mini USB | SD HC | Portrait | IP67 | 5 V DC/ 24 V DC |

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

GT12

Programmable Display
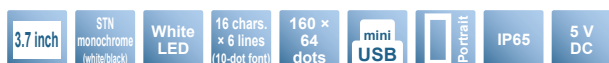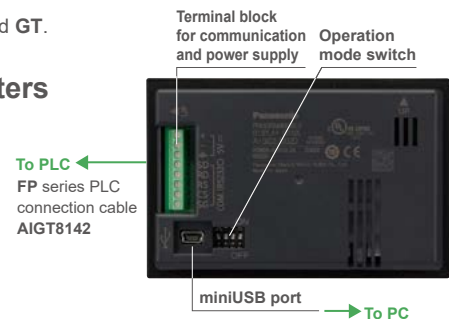
Slim body equipped with a 4.6 inch half-QVGA LCD
The highest visual quality in its class

4.6 inch CE c(UL)us

Pure black

Hairline silver

GT12M

GT12G

74 mm
2.913 in

146 mm
5.748 in

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.

| White | ⟷ | Pink | ⟷ | Red | (**M** type) |
| Green | ⟷ | Orange | ⟷ | Red | (**G** type) |

30 mm
1.181 in

Connector for communication and power supply

Battery holder and operation mode switch

SD memory card slot

To PLC
FP series PLC connection cable
AIGT8162

miniUSB port → To PC
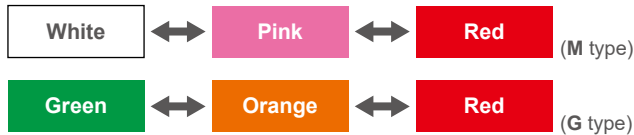
SD / SDHC memory card slot as equipment[2]

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**.
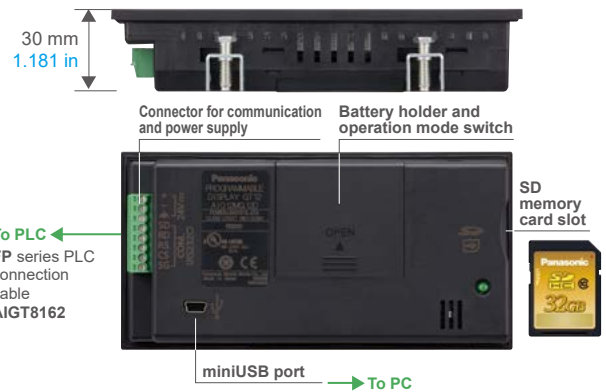
Flexible sizing and layout available for switches and characters

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:
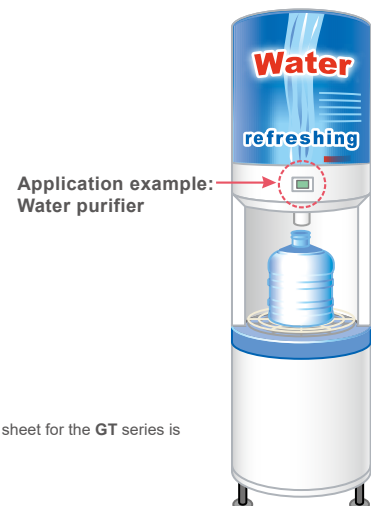Business dishwasher
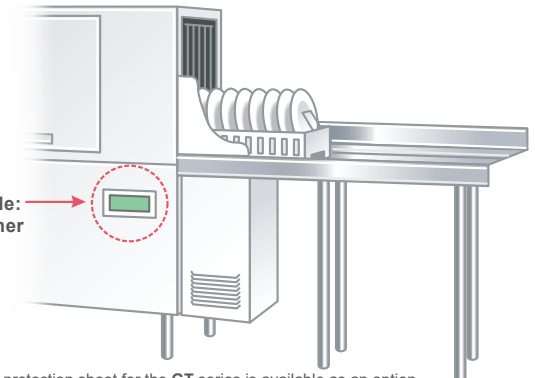
| 4.6 inch | TFT monochrome (white/black) | 3-color LED (white/pink/red) (green/orange/red) | 32 chars. × 12 lines (10-dot font) | 320 × 120 dots | mini USB | SDHC | Portrait | IP67 | 24 V DC |

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

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GT05

Programmable Display

Compact size and equipped with a QVGA LCD
Both the color and monochrome types display striking images

3.5 inch CE c(UL)us

General-purpose model

Pure black   Hairline silver   Pure black

GT05M   **GT05G**   **GT05S**

92.2 mm
3.630 in

110 mm
4.331 in

GT05M: red   **GT05M**: pink   **GT05G**: orange   **GT05G**: red

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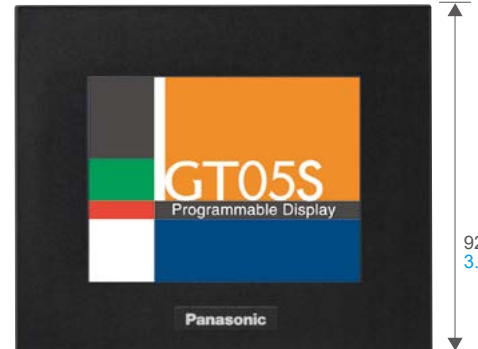
| GT05M / GT05G |

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
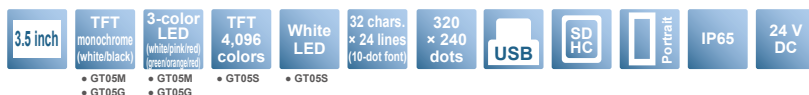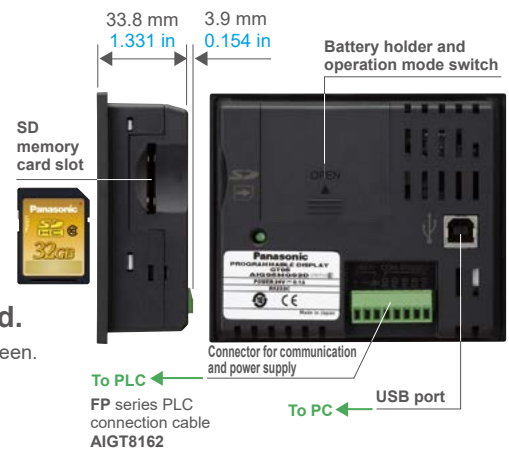
33.8 mm   3.9 mm
1.331 in   0.154 in

Battery holder and operation mode switch

SD memory card slot

Connector for communication and power supply

To PLC ◀
FP series PLC connection cable
AIGT8162

To PC ◀
USB port

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

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

GT32-R

Programmable Display

GT32M/T now with improved performance!

TFT LCD · High brightness · Energy saving · IP67

5.7 inch CE c(UL)us

General-purpose model

Pure black

GT32T-R

Hairline silver

128.8 mm
5.071 in

GT32M-R

163.2 mm
6.425 in

GT32T-R

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.

39.1 mm
1.539 in   1.5 mm
0.059 in

SD memory card slot

Battery holder and operation mode switch

USB port

To PC ←

To PLC ←

Connector for communication and power supply

FP series PLC connection cable **AIGT8162**

5.7 inch · TFT monochrome (black/white) ·GT32M-R · TFT 4,096 colors ·GT32T-R · White LED · 32 chars. × 24 lines (10-dot font) · 320 × 240 dots · USB · SDHC · Portrait · IP67 · 24 V DC

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

21
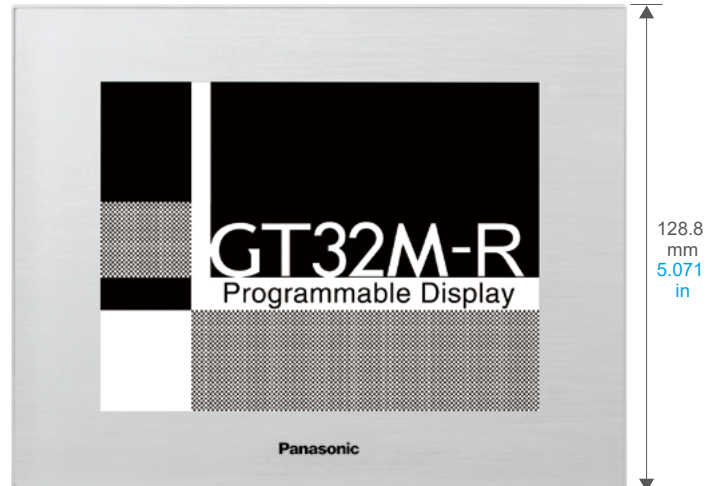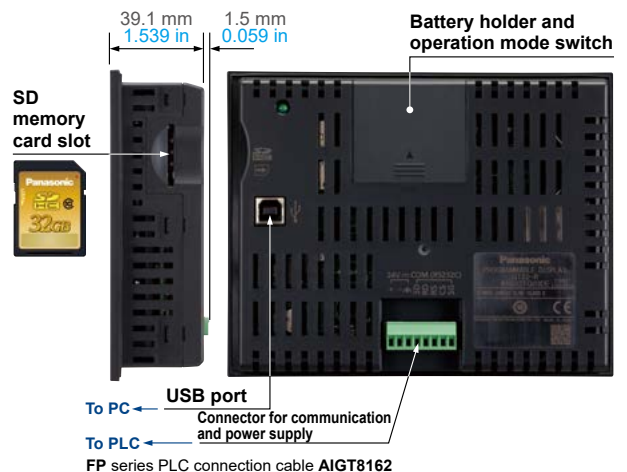
Terminal GTWIN Ver.3

Screen Creation Tool for the GT series

Easier to use with upgraded user interface!

File manager window
Map format makes it easy to grasp the main and edit-in-progress screens. Switching to list or thumbnail format is possible. Display of all function trees such as configuration settings and logging can be switched using tabs.

Toolbar
Commonly used functions can be executed with the single click of an icon.

Part library window
Select library easily from dropdown menu. Verify ON / OFF status in the library window before pasting.

Search results and text string list window
Edit the screen while viewing device search results and text string list.

Screen edit window
Use drag and drop to create screen.

Part edit screen
Switch designs are also changed instantly. Just a single click can also change between switches and lamps.

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

Common to both GTWIN Ver. 2 and Ver. 3

Compatible with Windows®8 / 8.1 / 10
(Also supports 64-bit version.)

Compatible with the nine languages for the menu

English

The menu can be indicated in Japanese, English, Simplified Chinese, Traditional Chinese (Note), Korean (Note), German (Note), Italian (Note), Spanish (Note) and French (Note).

Note: Ver.2 only

German

Simplified Chinese

Japanese

Screen copy in bitmap form

You can output screen images in bitmap form and use them in off-the-shelf applications. This is useful for preparing equipment operation manuals.

Simply drag-and-drop parts

You can easily create screens by just dragging parts from the library and dropping them anywhere you want.

Function to turn on / off the display of keyboard parts on the base screen

Indications of data parts in Japanese, Simplified Chinese, Traditional Chinese, and Korean

Now supports installation in a portrait orientation of all GT series models

Reduced site licensing fee and bother

The licensing fee and extra work that was involved in license (serial code) management have been greatly reduced.

| WIN 2000 (Ver.2 only) | WIN XP (Ver.2 only) | WIN Vista | WIN 7 | WIN 8 | WIN 8.1 | WIN 10 | Required disk space 800 MB min. |

* The 64-bit version is not supported except for Windows® 10, Windows® 8.1, Windows® 8 or Windows® 7.
* Windows is registered trademark or trademark of Microsoft Corporation in the United States and other countries.

GT series | 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		◎
	IQ-F series	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	◎	
		CJ2M	◎	
	CP1 series	CP1H	○	
		CP1L	○	
		CP1E	◎[*4]	○
Toshiba Machine[*1]	TC mini series		◎ Models with RS-232C port	◎ Models with RS-485 port
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 Nano series		◎	
	KV series	KV-10/16/24/40	◎	
		KV700	◎	○
		KV1000	◎	○
		KV3000	◎	○
		KV5000	○	○
Hitachi Industrial Equipment Systems[*1]	EH-150 EHV series	EHV-CPU128	◎	◎
		EHV-CPU64	◎	◎
		EHV-CPU32	◎	◎
		EHV-CPU16	◎	◎
	EH150 series	EH-CPU104A	◎	◎
		EH-CPU208A	◎	◎
		EH-CPU316A	◎	◎
		EH-CPU516	◎	◎
		EH-CPU548	◎	◎
	MICRO-EH series	10-point		
		14 / 20-point	◎	
		23 / 28-point	◎	◎
		40 / 64-point		
	Web controller	10-point	◎	
		23-point	◎	◎
Rockwell Automation[*1] (Allen-Bradley) Models that support DF protocol	MicroLogix series	MicroLogix500	◎	
		MicroLogix1000	◎	
		MicroLogix1100	◎	
	SLC-500 series	SLC-5/03	◎	
		SLC-5/04	◎	
Siemens[*1]	S7-200 series	CPU222	○	◎
		CPU216	○	◎
		CPU215	○	◎
		CPU214	○	◎
		CPU212	○	◎
LS Industrial Systems[*1]	MASTER-K series	80S / 200S	◎	
		300S / 1000S	○	
Modbus[*1] Models that support RTU protocol		*3	◎	◎
General-purpose serial Our dedicated protocol		*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.)
✕: 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.

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
					RS-422 / RS-485	Silver	Not available	AIG03MQ05DE
	GT03T-E	TFT color LCD (white backlight)	3.5 inch	24 V DC	RS-232C	Silver	Available	AIG03TQ13DE
					RS-422 / RS-485	Silver	Available	AIG03TQ15DE
	GT32M-E	TFT monochrome LCD (white backlight)	5.7 inch	24 V DC	RS-232C	Silver	Available	AIG32MQ03DE
					RS-422 / RS-485	Silver	Available	AIG32MQ05DE
	GT32T-E	TFT color LCD (white backlight)	5.7 inch	24 V DC	RS-232C	Silver	Available	AIG32TQ03DE
					RS-422 / RS-485	Silver	Available	AIG32TQ05DE
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)	3.8 inch	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)	4.6 inch	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
						Hairline silver		AIG02MQ03D
					RS-422 / RS-485	Pure black		AIG02MQ04D
						Hairline silver		AIG02MQ05D
				24 V DC	RS-232C	Pure black	Not available	AIG02MQ12D
						Hairline silver		AIG02MQ13D
					RS-422 / RS-485	Pure black		AIG02MQ14D
						Hairline silver		AIG02MQ15D
					RS-232C	Pure black	Available	AIG02MQ22D
						Hairline silver		AIG02MQ23D
					RS-422 / RS-485	Pure black		AIG02MQ24D
						Hairline silver		AIG02MQ25D
	GT02G	TFT monochrome LCD (green / orange / red backlight)	3.8 inch	5 V DC	RS-232C	Pure black	Not available	AIG02GQ02D
						Hairline silver		AIG02GQ03D
					RS-422 / RS-485	Pure black		AIG02GQ04D
						Hairline silver		AIG02GQ05D
				24 V DC	RS-232C	Pure black	Not available	AIG02GQ12D
						Hairline silver		AIG02GQ13D
					RS-422 / RS-485	Pure black		AIG02GQ14D
						Hairline silver		AIG02GQ15D
					RS-232C	Pure black	Available	AIG02GQ22D
						Hairline silver		AIG02GQ23D
					RS-422 / RS-485	Pure black		AIG02GQ24D
						Hairline silver		AIG02GQ25D
	GT05M	TFT monochrome LCD (white / pink / red backlight)	3.5 inch	24 V DC	RS-232C	Pure black	Available	AIG05MQ02D
						Hairline silver		AIG05MQ03D
					RS-422 / RS-485	Pure black		AIG05MQ04D
						Hairline silver		AIG05MQ05D
	GT05G	TFT monochrome LCD (green / orange / red backlight)	3.5 inch	24 V DC	RS-232C	Pure black	Available	AIG05GQ02D
						Hairline silver		AIG05GQ03D
					RS-422 / RS-485	Pure black		AIG05GQ04D
						Hairline silver		AIG05GQ05D
	GT05S	TFT color LCD (white backlight)	3.5 inch	24 V DC	RS-232C	Pure black	Available	AIG05SQ02D
						Hairline silver		AIG05SQ03D
					RS-422 / RS-485	Pure black		AIG05SQ04D
						Hairline silver		AIG05SQ05D

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

Main Unit and Tool Software
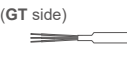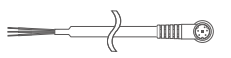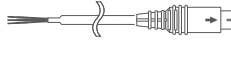
Type	Product name	Description							Part No.
		LCD	Screen size	Power supply	Communication port	Color of front panel	SD memory card slot (Note)	
General-purpose model	GT12M	TFT monochrome LCD (white / pink / red backlight)	4.6 inch	24 V DC	RS-232C	Pure black	Not available	AIG12MQ02D
						Hairline silver		AIG12MQ03D
					RS-422 / RS-485	Pure black		AIG12MQ04D
						Hairline silver		AIG12MQ05D
					RS-232C	Pure black	Available	AIG12MQ12D
						Hairline silver		AIG12MQ13D
					RS-422 / RS-485	Pure black		AIG12MQ14D
						Hairline silver		AIG12MQ15D
	GT12G	TFT monochrome LCD (green / orange / red backlight)	4.6 inch	24 V DC	RS-232C	Pure black	Not available	AIG12GQ02D
						Hairline silver		AIG12GQ03D
					RS-422 / RS-485	Pure black		AIG12GQ04D
						Hairline silver		AIG12GQ05D
					RS-232C	Pure black	Available	AIG12GQ12D
						Hairline silver		AIG12GQ13D
					RS-422 / RS-485	Pure black		AIG12GQ14D
						Hairline silver		AIG12GQ15D
	GT32M-R	TFT monochrome LCD (white backlight)	5.7 inch	24 V DC	RS-232C	Pure black	Available	AIG32MQ02DR
						Hairline silver		AIG32MQ03DR
					RS-422 / RS-485	Pure black		AIG32MQ04DR
						Hairline silver		AIG32MQ05DR
	GT32T-R	TFT color LCD (white backlight)	5.7 inch	24 V DC	RS-232C	Pure black	Available	AIG32TQ02DR
						Hairline silver		AIG32TQ03DR
					RS-422 / RS-485	Pure black		AIG32TQ04DR
						Hairline silver		AIG32TQ05DR
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
					RS-422 / RS-485			AIG02LQ04D
Terminal GTWIN Ver.2	Japanese version	Terminal GTWIN CD-ROM						AIGT8000V2
	English version	Terminal GTWIN CD-ROM						AIGT8001V2
Terminal GTWIN Ver.2 Upgrade version *1	Japanese version	Terminal GTWIN CD-ROM						AIGT8000V2R
	English version	Terminal GTWIN CD-ROM						AIGT8001V2R
Terminal GTWIN Ver.3 *2	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: For upgrading **Terminal GTWIN** Ver. 1 to Ver. 2.
*2: 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**) [*2]
5 V DC RS-422 / RS-485	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	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**) [*2]
24 V DC RS-232C	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**) [*3]
24 V DC RS-232C	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**) [*3]
24 V DC RS-422 / RS-485	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	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** series, please use a commercially available discrete wire cable.
*3: For **FP7** series, please use commercially available D-SUB 9-pin (female) connector cable with discrete wire.

GT series | PART NUMBER LIST
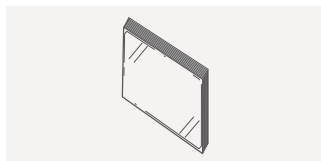
Options

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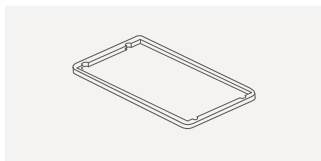
■ Waterproof packing
Waterproof packing (for replacement), 10 pieces in a set
Package includes one piece.

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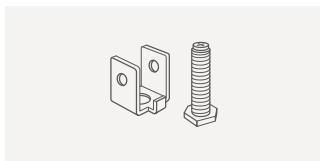
■ GT02 / GT02L / GT703 / GT03-E / GT12 / GT704 mounting parts
5 sets of mounting parts (4 parts / set)
Package includes one set.

Part No.: **AIG12830**
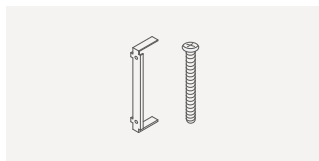
■ GT05 / GT32-R / GT32-E mounting parts
5 sets of mounting parts (2 parts / set)
Package includes one set.

Part No.: **AIGT28321** For **GT05**

Part No.: **AIG32830** For **GT32-R/E**
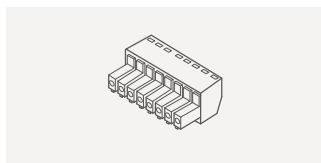
■ Spare connector
5 connectors for communication and power supply in a set
Package includes one set.

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**

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Tough

	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
CE marking directive compliance		EMC Directive, RoHS Directive							
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/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), 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 / cUL standards

UL / cUL 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.

GT series | SPECIFICATIONS

Product name Item / Type	GT02L 5 V, RS-232C	5 V, RS-422 / RS-485	GT02 5 V, RS-232C	5 V, RS-422 / RS-485	24 V, RS-232C	24 V, RS-422 / RS-485	GT05M / GT05G RS-232C	RS-422 / RS-485	GT05S RS-232C	RS-422 / RS-485
CE marking directive compliance	EMC Directive, RoHS Directive									
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/s², 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/s², 3 times in each of the X, Y and Z directions						98 m/s², 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
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	———		SRAM							
Backup battery	———		Lithium battery (replaceable) **AFPX-BATT** (Does not include with product.) (Note 9)							

Conformance to the UL / cUL standards

UL / cUL 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.

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	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
CE marking directive compliance		EMC Directive, RoHS Directive												
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/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 2)												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 3)	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 4)	
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)	

		GT703M				GT703G				GT704M		GT704G		GT707
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)
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 / cUL standards

UL / cUL 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. 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 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.

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GT series | SPECIFICATIONS

Product name / Item / Type	GT12		GT32M-R		GT32T-R	
	RS-232C	RS-422 / RS-485	RS-232C	RS-422 / RS-485	RS-232C	RS-422 / RS-485
CE marking directive compliance	EMC Directive, RoHS Directive					
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 / cUL standards

UL / cUL 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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GT series | DIMENSIONS (Unit: mm in)

The CAD data can be downloaded from our website.

GT02L

With the mounting brackets

27 1.063
4 0.157
112 4.409
89.5 3.524 (Display)
36.4 1.433 (Display)
74 2.913
85 3.346

13 0.512 — Operation mode switch — 13 0.512

Terminal block for communication and power supply
miniUSB port
75 2.953

Panel cutout dimensions
105 ±1 4.134 ±0.039
67 ±1 2.638 ±0.039

Applicable panel thickness: 1.0 mm to 5.0 mm
0.039 in to 0.197 in

GT02

With the mounting brackets

27 1.063
4 0.157
112 4.409
90.5 3.563 (Display)
37.4 1.472 (Display)
74 2.913
85 3.346

13 0.512 — Battery holder and operation mode switch — 13 0.512
9 0.354

SD memory card slot
Connector for communication and power supply
miniUSB port
75 2.953

* The above drawing shows the type with the SD memory card slot.

Panel cutout dimensions
105 ±1 4.134 ±0.039
67 ±1 2.638 ±0.039

Applicable panel thickness: 1.0 mm to 5.0 mm
0.039 in to 0.197 in

GT703

SD memory card slot

Battery holder and operation mode switch
LAN port
9 0.354
37.4 1.472 (Display)
74 2.913
74 2.913

Connector for communication and power supply
miniUSB port

4 0.157
31 1.220
90.5 3.563 (Display)
112 4.409

Panel cutout dimensions
105 ±1 4.134 ±0.039
67 ±1 2.638 ±0.039

Applicable panel thickness: 1.0 to 5.0 mm
0.039 to 0.197 in

GT03M-E

Connector for communication and power supply
Operation mode switch

53.7 2.114 (Display)
86 3.386
76.2 3.000

4 0.157
71.4 2.811 (Display)
98 3.858
87.2 3.433

miniUSB port

28 1.102
87.5 +1/0 3.445 +0.039/0

Panel cutout dimensions
76.5 +1/0 3.012 +0.039/0

Applicable panel thickness: 1.0 mm to 5.0 mm
0.039 in to 0.197 in

GT03T-E

Connector for communication and power supply
Battery holder and operation mode switch

53.7 2.114 (Display)
86 3.386
76.2 3.000

SD memory card slot

4 0.157
71.4 2.811 (Display)
98 3.858
87.2 3.433

miniUSB port

30 1.181
87.5 +1/0 3.445 +0.039/0

Panel cutout dimensions
76.5 +1/0 3.012 +0.039/0

Applicable panel thickness: 1.0 mm to 5.0 mm
0.039 in to 0.197 in

GT05

29.8 1.173
4 0.157
1 0.039 (Packing)
84.2 3.315
92.2 3.630
54.2 2.134 (Display)
72.0 2.835 (Display)
110.0 4.331

Battery holder and operation mode switch
98.2 3.866
SD memory card slot
107.4 4.228
OPEN
USB port
65.0 2.559
Connector for communication and power supply

Panel cutout dimensions
99.2 +1/0 3.906 -0.039/0
85.2 +1/0 3.354 +0.039/0

Applicable panel thickness: 1.0 mm to 5.0 mm
0.039 in to 0.197 in

GT704

SD memory card slot

Battery holder and operation mode switch

41.8 1.646 (Display)
74 2.913
66 2.598

Connector for communication and power supply
miniUSB port
LAN port

4 0.157
34 1.339
109.8 4.323 (Display)
146 5.748
138 5.433

Panel cutout dimensions
139.0 +1/0 5.472 +0.039/0
67.0 +1/0 2.638 +0.039/0

Applicable panel thickness: 1.0 to 5.0 mm
0.039 to 0.197 in

GT12

30 1.181
146 5.748
109.8 4.323 (Display)
4 0.157
41.8 1.646 (Display)
74 2.913

Battery holder and operation mode switch
138 5.433
66 2.598
OPEN

SD memory card slot
Connector for communication and power supply
miniUSB port

Panel cutout dimensions
139.0 +1/0 5.472 +0.039/0
67.0 +1/0 2.638 +0.039/0

Applicable panel thickness: 1.0 mm to 5.0 mm
0.039 in to 0.197 in

31

GT series | DIMENSIONS (Unit: mm in)

GT32-E GT32-R

SD memory card slot

39.1 / 1.539
4.0 / 0.157
128.8 / 5.071
87.4 / 3.441 (Display)

116.2 4.575 (Display)

163.2 / 6.425

Battery holder and operation mode switch
150.2 / 5.913

118.8 / 4.677

USB port

Connector for communication and power supply

Panel cutout dimensions

150.5 +1/0 / 5.925 +0.039/0
119 +1/0 / 4.685 +0.039/0

Applicable panel thickness: 1.0 mm to 5.0 mm
0.039 in to 0.197 in

GT707

154.3 6.075 (Display)
122 / 4.803
86.7 3.413 (Display)

34 / 1.339
5.2 / 0.205

186 / 7.323

Battery holder and operation mode switch
177 6.968

112.6 4.433

Terminal block for power supply
miniUSB port

COM port
SD memory card slot

178 +1/0 / 7.008 +0.039/0

Panel cutout dimensions

113.6 +1/0 / 4.472 +0.039/0

Applicable panel thickness: 1.0 mm to 5.0 mm
0.039 in to 0.197 in
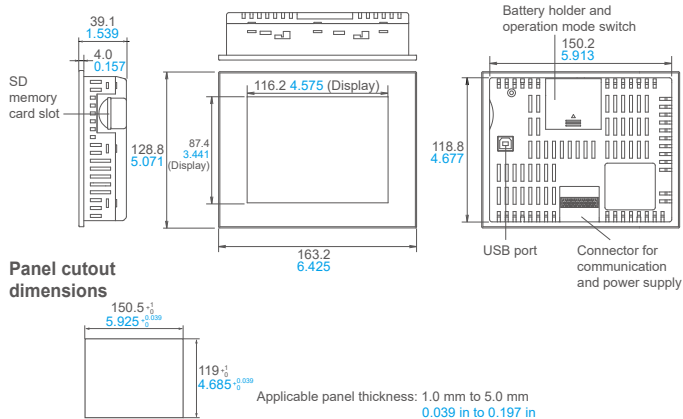

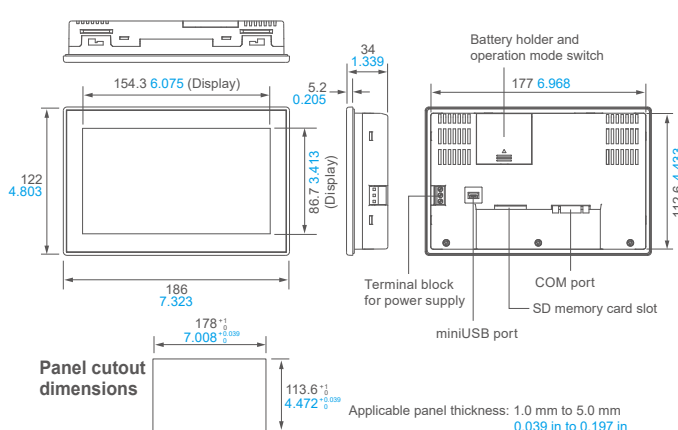
Information on a program controller

Programmable Controller FP7

Automation Controls + Information
Panasonic PLCs also control information

- **Use the Web server function to check accumulated data in the FP7 with a browser.**

Data

Operation can be monitored with a browser and control instructions can be sent from a browser.
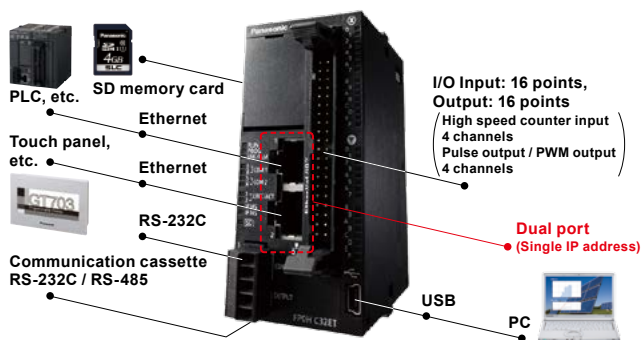
- **Ethernet/IP* compatibility Easy connection with all kinds of robots and PLCs enables control and communication.** *Ethernet/IP is a trademark of ODVA, Inc.
- **Can be expanded with a cassette for serial communication and analog function. Reduces unit cost and footprint.**
- **Without the requirement of a power supply unit or backplane, you can reduce the cost and footprint of your PLC configuration.**

Programmable Controller FP0H

NEW

Built-in dual Ethernet ports
Multiple interfaces that connect with various devices

PLC, etc.
SD memory card
Ethernet
Touch panel, etc.
Ethernet
RS-232C
Communication cassette RS-232C / RS-485

I/O Input: 16 points, Output: 16 points
High speed counter input 4 channels
Pulse output / PWM output 4 channels

Dual port (Single IP address)

USB
PC

- **Up to 384 I/O points FP0H / FPΣ / FP0R units can be added.**
- **Use Ethernet to share data among controllers. Distributed control is possible for each control.**
- **With support for Ethernet/IP, Modbus-TCP and MC protocol, a variety of devices can be connected.**
- **Despite being super miniature, basic performance has greatly increased.**

Please contact ....

No. CE-GT-5-5 July, 2018

Specifications are subject to change without notice.

单击下面可查看定价，库存，交付和生命周期等信息

>>Panasonic(松下)