# Panasonic
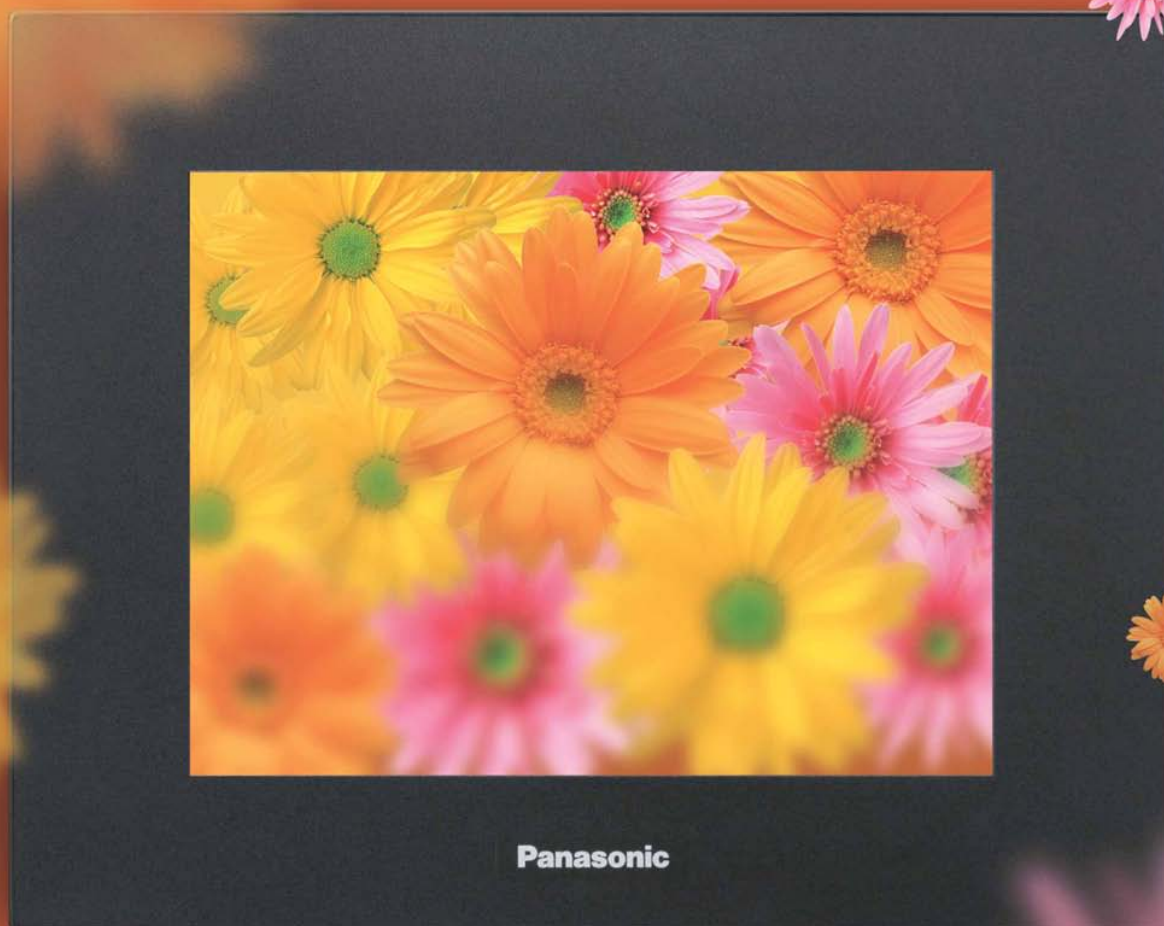## ideas for life

# GTseries
**Programmable Display**

GT01  GT01R  GT05  GT11  GT21C  GT32

Touch and feel the vividness.

**Programmable Display GT series**
ARCT1B305E '08.4

**New**

## Matsushita Electric Works, Ltd.

| GT05G | GT05S | GT21C | GT32M | GT32T0 | GT32T1 |
|---|---|---|---|---|---|
| 24V DC | 24V DC | 24V DC | 24V DC | 24V DC | |
| 3.5 inch | 3.5 inch | 4.7 inch | 5.7 inch | 5.5 inch | |
| STN monochrome LCD | STN color LCD | STN color LCD | STN monochrome LCD | TFT color LCD | |
| 2 colors (black/white) | 4,096 colors | 256 colors | 2 colors (blue/white) | 4,096 colors | |
| 320 (W) × 240 (H) | 320 (W) × 240 (H) | 320 (W) × 240 (H) dots | 320 (W) × 240 (H) dots | 320 (W) × 240 (H) dots | |
| 3-color LED (green/orange/red) | White LED | White LED | CFL | CFL | |
| 768 characters | 768 characters | 768 characters | 768 characters | 768 characters | |
| 2 Mbyte | 12 Mbyte | 6.5 Mbyte | 2 Mbyte | 12 Mbyte | |
| RS232C / RS422 (RS485) | RS232C / RS422 (RS485) | RS232C / RS422 (RS485) | RS232C / RS422 (RS485) | RS232C / RS422 (RS485) | |
| ○ | ○ | — | ○ | ○ | ○ |
| — | — | — | — | — | ○ |
| ○ | ○ | — | ○ | ○ | ○ |
| — | — | — | — | — | ○ |

GT series programmable displays pursuing

the fundamentals of communication ultimately

brings out the beauty of functionality.

Look, listen, and touch.

## Cost and space saving

Eliminates the need for arranging many parts, securing a stock of parts, and wiring each switch.
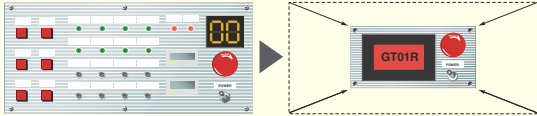


• Improves the design and operability
• Easy to change the settings by model and user

## 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 | 諸多指教 | 안녕하세 |
| 000 | SW1 | 1 | 1 | 1 | 1 | 1 |
| 000 | SW1 | 2 | 2 | 2 | 2 | 2 |

## Wide variety of functions
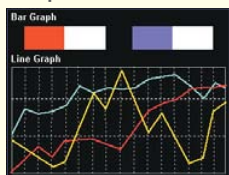
**"Write Device function"**



This function modifies the PLC data or turns bits on/off according to the PLC status or the screen No.

**"Recipe function"**



Settings by product item and other data (up to 3,600 words) can be transferred to PLC, simplifying PLC programming.

**"Graph function"**



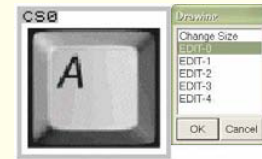You can identify the production or operation status in line or bar graph form.

**"Flow Display function"**



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

## The backlight can be controlled via PLC.

For example, when a sensor detects a person, the display backlight can be turned by an instruction from a PLC. It is also possible to turn off the backlight when a preset period of time elapses after the last operation.



## Custom switches

Capable of creating custom switches using bitmap data, multicolor custom lamps, and display of multiple text messages.



## Compatible with the eight languages for the GTWIN menu

<Available languages>

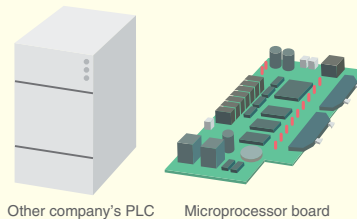| | | | |
|---|---|---|---|
| Japanese | English | German | French |
| Spanish | Simplified Chinese | Korean | Italian |

## RS232C/RS422 (RS485)
## Interface

Equipped with an RS232C/RS422 (RS485) serial port, which allows connection with a PLC from various companies (Please refer to the PLC Compatibility table.)
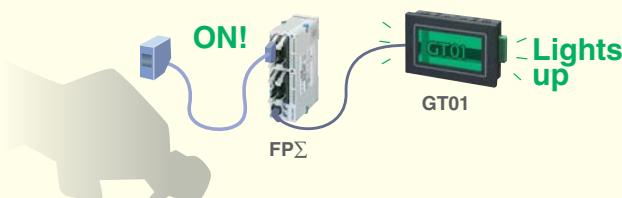
*The RS422 type can be connected at a maximum distance of 500m.



Other company's PLC    Microprocessor board

**Also supports connection with a PLC of another company or a microprocessor board.**

## Startup screen

An original screen can be displayed for a specified period of time after startup.

# Simple maintenance

## High-efficiency operation by the "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.
GT32T1 supports Ethernet connection, which allows the "through" function to be controlled from a remote location.
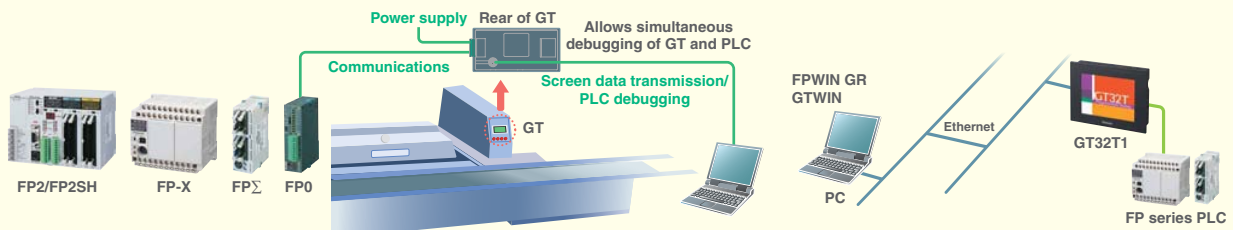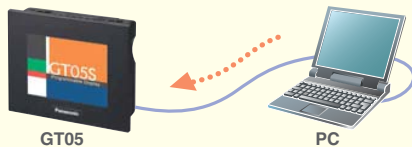


## USB interface equipment
### (GT05/GT32)

You can connect your PC and GT using your USB cable to transfer screen data.

*Also supports the "through" function for our FP series PLC.



## Maintenance-free LED backlight
### (GT01/GT01R/GT05/GT11/GT21C)
The use of the LED backlight eliminated backlight replacement work.

## Alarm list
### (GT05/GT11/GT21C/GT32)

Alarm activation, check, and recovery can be recorded and displayed.


(GT11)


(GT21C)

## Slot for SD memory card of up to 1 GB
### (GT05/GT32)

Easy to copy screen data. Also serves as storage for output sound files. (GT32T1)


SD memory card

## Transformer-isolated power supply
### (GT05/GT32)

The isolated power supply enhances the reliability.

## Firmware upgrade

The display firmware is automatically upgraded when screen data is transferred. The firmware can be updated by downloading the latest version of Terminal GTWIN from our website (http://www.mew.co.jp/ac/e/).
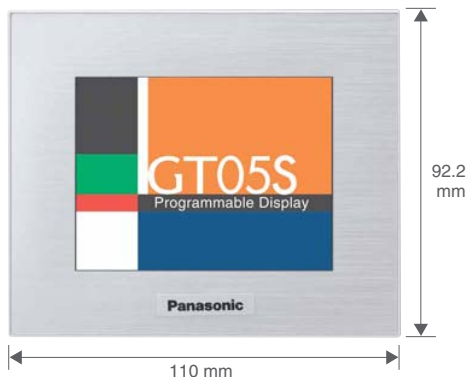
# GT05S

**Compact Programmable Display**

The industry's smallest 3.5-inch STN color display capable of displaying colorful images in a limited space

## 3.5 inch  C E

Pure black



Hairline silver



92.2 mm

110 mm

### 3.5-inch STN 4,096-color QVGA LCD with a wide viewing angle

Although the LCD is an STN type, a wide viewing angle (50 deg horizontally, 60 deg vertically) has been achieved, improving visibility from different angles.

### The new backlight provides twice the brightness[2].

### SD memory card slot as standard equipment (1 GB max)

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

### USB interface as standard equipment

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

### Characters of a 240-dot maximum size can be displayed.

Capable of displaying several fine ten-dot characters or one 240-dot character in full screen

### Transformer-isolated power supply

The isolated power supply enhances the reliability.

*1
33.8mm   3.9mm



| 3.5 inch | STN 4,096 colors | White LED backlight | 32 chars. ×24 lines (10-dot font) | 320 ×240 dots | USB | SD | 24V DC |

*1: Note that the COM port connector projects an additional 3.9 mm.
     Also take the cable diameter must be taken into account.
*2: Compared with GT21C
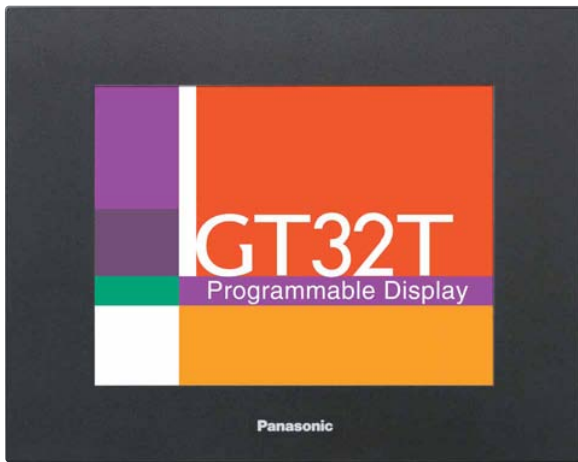• The panel face protection sheet for the GT series is available as an option.

# GT32T0/T1

**Programmable Display**

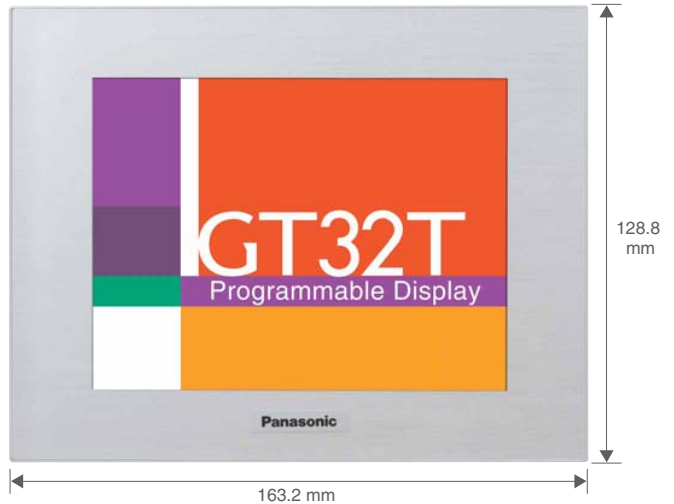Amazingly beautiful and vivid
4,096-color TFT LCD

5.5 inch  CE  c(UL)us

Pure black

Hairline silver

128.8 mm

163.2 mm

39.1mm   *1 5.2mm

## The 4,096-color TFT LCD screen displays magnificent quality images.

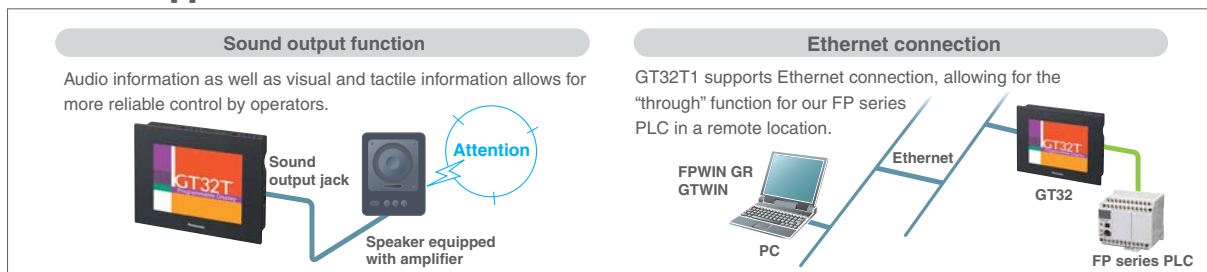## The industry's smallest size in the 5-inch class, and 39.1-mm thin and cool body design

### SD memory card slot as standard equipment (1 GB max)
Useful for copying, backing up, and restoring screen data, and for saving sound files
Sound files can also be saved in the internal memory of the display.

### USB interface as standard equipment

### Transformer-isolated power supply

Slot for
SD memory card

USB port

Ethernet port
(GT32T1)

Sound output jack
(GT32T1)

### GT32T1 supports:

| Sound output function |
|---|
Audio information as well as visual and tactile information allows for more reliable control by operators.

Sound output jack

**Attention**

Speaker equipped
with amplifier

| Ethernet connection |
|---|
GT32T1 supports Ethernet connection, allowing for the "through" function for our FP series PLC in a remote location.

FPWIN GR
GTWIN

Ethernet

GT32

PC

FP series PLC

| 5.5 inch | TFT 4,096 colors | CFL backlight | 32 chars. ×24 lines (10-dot font) | 320 ×240 dots | USB | SD | Ether net (GT32T1) | Sound output (GT32T1) | 24V DC |

*1: Note that the COM port connector projects an additional 5.2mm. Also take the cable diameter must be taken into account.
• The panel face protection sheet for the GT series is available as an option.

# GT11

**Compact Programmable Display**

The 4-inch wide screen equipped with a high-definition LCD can display a lot of information in its small space.

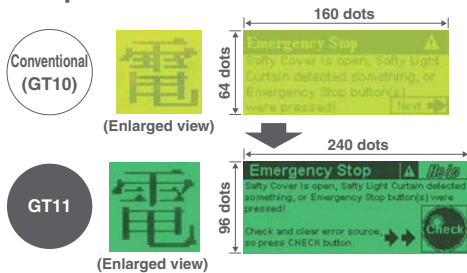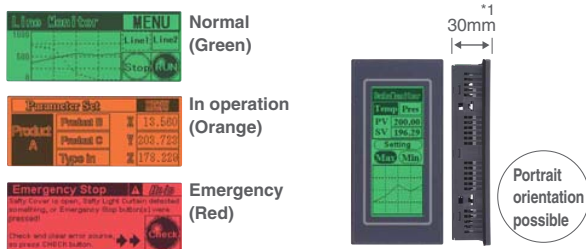4 inch   C€   c(UL)us

Black



Ash gray



72 mm

144mm

## Approx. doubled information capacity compared with GT10

Conventional (GT10)

160 dots
64 dots

(Enlarged view)

GT11

240 dots
96 dots

(Enlarged view)

## Three-color backlight shows the equipment status.

Normal (Green)

In operation (Orange)

Emergency (Red)

*1
30mm

Portrait orientation possible

| 4 inch | STN monochrome (white/black) | 3-color LED backlight (green/orange/red) | 24 chars. ×9 lines (10-dot font) | 240 ×96 dots | 24V DC |

*1: When the panel thickness is 5 mm, the screw head of the mounting bracket protrudes 4 mm.
*2: Note that the COM port connector projects an additional 7mm. Also take the cable diameter must be taken into account.
• The panel face protection sheet for the GT series is available as an option.

# GT21C

**Programmable Display**

4.7-inch STN 256-color type.
The image vividness is equivalent to that of the 5.7-inch type display, which can be replaced with this model.

4.7 inch   C€   c(UL)us

Pure black



Hairline silver



112 mm

142mm
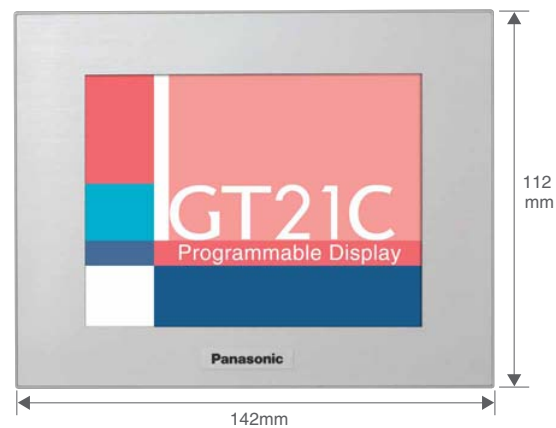
## Maintenance-free white LED backlight

**The total depth (excluding the display frame) is 29.9 mm, fitting a variety of installation locations.**

29.9mm   *2 7mm

**Portrait orientation possible**

Portrait orientation possible

| 4.7 inch | STN 256 colors | White LED backlight | 32 chars. ×24 lines (10-dot font) | 320 ×240 dots | 24V DC |

# GTseries | PLC Compatibility Table

Models listed are the models that have been evaluated as of March, 2008.

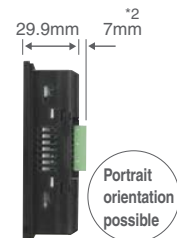| Company | Series | Model | GT01/GT01R/GT05/GT11/GT21/GT32 | |
|---|---|---|---|---|
| | | | RS232C type | RS422 (RS485) type*2 |
| Matsushita Electric Works | FP series | FP-X | ◎ | ○ |
| | | FPΣ | ◎ | ○ |
| | | FP-e | ◎ | ○ |
| | | FP0 | ◎ | ○ |
| | | FP2 | ◎ | ○ |
| | | FP2SH | ◎ | ○ |
| Mitsubishi Electric*1 | FX series | FX0N | ○ | ◎ |
| | | FX1S | ○ | ◎ |
| | | FX1N | ○ | ◎ |
| | | FX1NC | ○ | ◎ |
| | | FX2N | ○ | ◎ |
| | | FX2NC | ○ | ◎ |
| | | FX3UC | ○ | ◎ |
| | | FX3U | ○ | ◎ |
| | Q series | Q00CPU | ◎ | |
| | | Q01CPU | ◎ | |
| | | Q00JCPU | ○ | |
| | | Q00HCPU | ○ | |
| | | Q25HCPU | ◎ | |
| | | Q12HCPU | ◎ | |
| | | Q06HCPU | ◎ | |
| | | Q02HCPU | ◎ | |
| | | Q02CPU | ◎ | |
| | A series | A1N | ○ | |
| | | A2N | ○ | |
| | | A3N | ○ | |
| | | A1S | ○ | |
| | | A1SJ | ○ | |
| | | A2SH | ○ | |
| | | A1SH | ○ | |
| | | A2CCPU24 | ◎ | |
| 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 | ○ | |
| | | C200HE-CPU32 | ○ | |
| | | C200HG-CPU33-Z | ○ | |
| | | C200HG-CPU33 | ○ | |
| | | C200HG-CPU53-Z | ○ | |
| | | C200HG-CPU53 | ○ | |
| | | C200HX-CPU34-Z | ○ | |
| | | C200HX-CPU34 | ○ | |
| | | C200HX-CPU54-Z | ○ | |
| | | C200HX-CPU54 | ○ | |
| | | C200HE-CPU42-Z | ◎ | |
| | | C200HE-CPU42 | ◎ | |
| | | C200HG-CPU43-Z | ◎ | |
| | | C200HG-CPU43 | ◎ | |
| | | C200HG-CPU63-Z | ◎ | |
| | | C200HG-CPU63 | ◎ | |
| | | C200HX-CPU44-Z | ◎ | |
| | | C200HX-CPU44 | ◎ | |
| | | C200HX-CPU64-Z | ◎ | |
| | | C200HX-CPU64 | ◎ | |
| | | C200HX-CPU65-Z | ◎ | |
| | | C200HX-CPU85-Z | ◎ | |
| | CV series | CV500 | ◎ | |
| | | CV1000 | ◎ | |
| | | CVM1 | ◎ | |

| Company | Series | Model | GT01/GT01R/GT05/GT11/GT21/GT32 | |
|---|---|---|---|---|
| | | | RS232C type | RS422 (RS485) type*2 |
| Omron*1 | CS1 series | CS1H-CPU67 | ○ | |
| | | CS1H-CPU66 | ◎ | |
| | | CS1H-CPU65 | ◎ | |
| | | CS1H-CPU64 | ◎ | |
| | | CS1H-CPU63 | ◎ | |
| | | CS1G-CPU45 | ◎ | |
| | | CS1G-CPU44 | ◎ | |
| | | CS1G-CPU43 | ◎ | |
| | | CS1G-CPU42 | ◎ | |
| | CJ1 series | CJ1H | ◎ | |
| | | CJ1M | ◎ | |
| | | CJ1G | ◎ | |
| | CP1 series | CP1H | ○ | |
| | | CP1L | ○ | |
| Toshiba Machine*1 | TC mini series | | ◎ (Models with RS232 port) | ◎ (Models with RS485 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 series | KV-10/16/24/40 | ◎ | |
| | | KV700 | ◎ | ○ |
| | | KV1000 | ◎ | ○ |
| Hitachi (new) | EH-150 EHV series | EHV-CPU128 | ◎ | ◎ |
| | | EHV-CPU64 | ◎ | ◎ |
| | | EHV-CPU32 | ◎ | ◎ |
| | | EHV-CPU16 | ◎ | ◎ |
| | EH-150 series | EH-CPU104A | ◎ | ◎ |
| | | EH-CPU208A | ◎ | ◎ |
| | | EH-CPU316A | ◎ | ◎ |
| | | EH-CPU516 | ◎ | ◎ |
| | | EH-CPU548 | ◎ | ◎ |
| | MICRO-EH series | 10-point | | |
| | | 14-point | ◎ | |
| | | 20-point | ◎ | |
| | | 23-point | ◎ | ◎ |
| | | 28-point | ◎ | ◎ |
| | | 40-point | ◎ | |
| | | 64-point | ◎ | |
| | Web Controller | 10-point | ◎ | |
| | | 23-point | ◎ | ◎ |
| ALLEN-BRADLEY*1 Models that support protocol | Micro Logic series | MicroLogix1000 | ◎ | |
| | SLC-500 series | SLC-5/03 | ◎ | |
| | | SLC-5/04 | ◎ | |
| Siemens*1 | S7-200 series | CPU222 | ○ | ◎ |
| | | CPU216 | ○ | ◎ |
| | | CPU215 | ○ | ◎ |
| | | CPU214 | ○ | ◎ |
| | | CPU212 | ○ | ◎ |
| LG*1 | MASTER-K series | 80S | ◎ | |
| | | 200S | ◎ | |
| | | 300S | ○ | |
| | | 1000S | ○ | |
| Modbus*1 | Models that support RTU protocol | *3 | ◎ | ◎ |
| General-purpose serial | MEW dedicated protocol | *3 | ◎ | ◎ |

*1. PLCs other than Matsushita Electric Works 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 RS485 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.

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

○: Connection is possible using the communications unit or a signal conversion cable, etc.
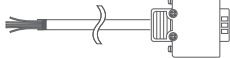 (Example: The QJ71C24N or QJ71C24N-R2 calculator link unit is required when using the Mitsubishi Q Series.)

×: Connection is not possible.

Blank: Not evaluated.

Refer to the "Technical Support Page" of our website (http://www.mew.co.jp/ac/e/) for details, including the latest version of Terminal GTWIN, usable devices and addresses.

## Cables | PLC connection cable

| Programmable Display | Connection cable | PLC |
|---|---|---|
| **GT01/GT01R**<br>**(5V DC, RS232C)** | (GT side) (PLC side)<br>Part No.: **AIGT8142\***, PLC connection cable (2 m), 5-pin mini-DIN connector — 4 single wires + Shielding wire | **Matsushita Electric Works FP Series** |
| **GT01/GT01R**<br>**(5V DC, RS422/RS485)** | Part No.: **AIGT8152\***, PLC connection cable (2 m), 8-pin mini-DIN connector — 6 single wires + Shielding wire | **Mitsubishi Electric FX Series** |
| **GT series**<br>**(24V DC, RS232C)** | Part No.: **AIGT8162**, PLC connection cable (2 m), 5-pin mini-DIN connector — 3 single wires + Shielding wire<br>AIGT8165 (5 m) and AIGT8160 (10 m) are also available. | **Matsushita Electric Works FP Series** |
| **GT series**<br>**(24V DC, RS422/RS485)** | Part No.: **AIGT8175**, PLC connection cable (5 m), 8-pin mini-DIN connector — 4 single wires + Shielding wire | **Mitsubishi Electric FX Series** |
| **GT series**<br>**(24V DC, RS232C)** | Part No.: **AIP81842**, PLC connection cable (2 m), 9-pin D-SUB connector — open wire | **Matsushita Electirc Works FP2/FP2SH COM port,**<br>**9-pin D-SUB connector example, CCU** |

*This cable is for GT01/GT01R, and power is supplied through the TOOL port.

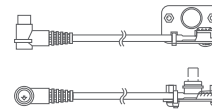### Screen data transmission cable (for DOS/V computers)

9-pin D-SUB connector —
5-pin mini-DIN connector (L type: 3 m)
Part No.: **AFC8503**

9-pin D-SUB connector —
5-pin mini-DIN connector (Straight type: 3 m)
Part No.: **AFC8503S**

### Tool port panel extension cable

Part No.: **AFC8532**

*For GT05/GT32, please use a commercially available A-B type USB cable.

• Different part numbers are applied to the cables available for Europe. Please refer to http://www.panasonic-electric-works.com/
• Different part numbers are applied to the cables available for North, Central and South Americas. Please refer to http://pewa.panasonic.com/acsd/
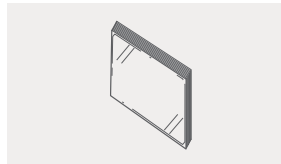
## Options

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

| | |
|---|---|
| GT01 | Part No.: **AIGT080** |
| GT01R | Part No.: **AIGT080R** |
| GT05 | Part No.: **AIG05800** |
| GT11 | Part No.: **AIGT280** |
| GT21 | Part No.: **AIGT28021** |
| GT32 | Part No.: **AIG32800** |
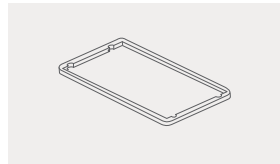
■**Waterproof packing**
Waterproof packing (for replacement), 10 pieces in a set
Package includes one set. One set is installed on main unit.

| | |
|---|---|
| GT01,<br>GT01R | Part No.: **AIGT081** |
| GT05 | Part No.: **AIG05810** |
| GT11 | Part No.: **AIGT181** |
| GT21 | Part No.: **AIGT28121** |
| GT32 | Part No.: **AIG32810** |
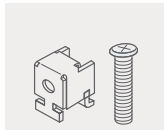
■**GT01/GT01R/GT11 mounting parts**
5 sets of mounting parts (4 parts/set)
Package includes one set. One set is installed on main unit.

Part No.: **AIGT083**
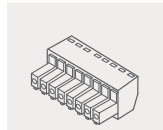
■**Spare connector**
COM. port connectors, 5 connectors in a set
One set is installed on main unit.

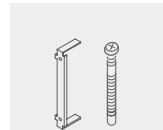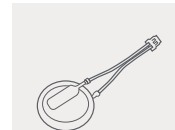Part No.: **AIGT084**

■**GT05/GT21C/GT32 mounting parts**
5 sets of GT05/GT21C/GT32 mounting parts (2 parts/set)
Package includes one set. One set is installed on main unit.

| GT05/GT21C |
|---|
| Part No.: **AIGT28321** |

| GT32 |
|---|
| Part No.: **AIG32830** |

■**GT05/GT32 backup battery**
* For GT11 and GT21C, please purchase a commercially available CR2032 battery.

Part No.: **AFPX-BATT**

| Item | GT21C | | GT32M | | GT32T0 | | GT32T1 | |
|---|---|---|---|---|---|---|---|---|
| | RS232C | RS422 | RS232C | RS422 | RS232C | RS422 | RS232C | RS422 |
| Rated voltage | 24 V DC | | | | | | | |
| Operating voltage range | 21.6 to 26.4 V DC | | | | | | | |
| Power consumption | 4.8W max. | | 10W max. | | | | 12W max. | |
| Power supply unit isolation method | — | | Transformer isolation | | | | | |
| Ambient temperature | 0 to 50°C*2 | | 0 to 50°C*3 | | | | | |
| Ambient humidity | 20 to 85% RH (No condensation at 25°C) | | | | | | | |
| Storage temperature | −20 to 60°C | | | | | | | |
| Storage humidity | 10 to 85% RH (No condensation at 25°C) | | | | | | | |
| Vibration resistance | 10 to 55 Hz (1-minute cycle): Double amplitude: 0.75 mm, 10 minutes in each of the X, Y, and Z directions | | | | | | | |
| Shock resistance | 98 m/s² min: 4 times in each of the X, Y, and Z directions | | | | | | | |
| Superposed noise suppression | 1,000 V [P-P] min, pulse width of 50 ns, 1 μs between power supply terminals (by a noise simulator) | | | | | | | |
| Environmental resistance | IP65 (in the initial stages) Dust-proof and drip-proof from the front of the panel only (Rubber packing is attached to the panel contact surface.) *When reattaching the panel, replace the waterproof packing. | | | | | | | |
| Mass | Approx. 330 g | | Approx. 500 g | | Approx. 470 g | | Approx. 480 g | |
| Display — Display device | STN color LCD | | STN monochrome LCD | | TFT color LCD | | | |
| Display — Resolution | 320 (W) x 240 (H) dots | | | | | | | |
| Display — Display color | 256 colors | | 2 colors (blue/white) | | 4,096 colors | | | |
| Display — Displayable area | 98.0 (W) x 74.0 (H) mm | | 113.2 (W) x 86.4 (H) mm | | 110.8 (W) x 83.6 (H) mm | | | |
| Display — Backlight | White LED *No need for replacement | | CFL *Not replaceable. Average life; GT32M: 75,000 hours (at 25°C), GT32T: 50,000 hours (at 25°C) | | | | | |
| Functions — Font types | Fixed (GTWIN) : 8 x 8, 16 x 8, and 16 x 16 dots, Characters can be displayed in the 1, 2, 4, or 8 times width or height, TrueType (GTWIN): 10 to 240 dots, Windows®: 10 to 240 dots | | | | | | | |
| Functions — Languages | Japanese, English, Korean, German, French, Spanish, Italian, Simplified Chinese, Traditional Chinese, Turkish | | | | | | | |
| Functions — Graphics | Straight lines, continuous straight lines, squares, circles, ovals, arcs, elliptic arcs, fan shapes, elliptic fan shapes, beveled squares, bitmaps | | | | | | | |
| Functions — Number of screens*4 | Approx. 250 screens | | Approx. 240 screens | | Approx. 180 screens | | | |
| Functions — Screen No. that can be set | Base screens: No. 0 to 3FF, Keyboard screens: No. 0 to 7 | | | | | | | |
| Functions — Part functions | Messages, lamps, switches, data, bar graphs, clocks, keyboards, line graphs, and alarm list parts | | | | | | | |
| Functions — Other functions | Recipe, flow display, write device, alarm record, alarm list, and language switching | | | | | | Sound output *5 | |
| Functions — Clock function | Provided with a built-in clock function. (Can also refer to and display a PLC clock.) *Buy a commercially available battery. | | | | | | | |
| Functions — Contrast adjustment | Contrast can be adjusted by using the touch panel. | | | | Not adjustable | | | |
| Functions — Automatic communication settings | The communication speed (baud rate) is automatically changed if there is no response from the target equipment. | | | | | | | |
| Functions — Debugging function | GT connected between a PC and PLC allows the PLC to be debugged without a direct connection with the PC. | | | | | | | |
| Functions — Screen creation | Dedicated software should be used. Applicable OS: Windows® 95 (OSR2 or later)/ 98/Me/2000/NT/XP/Vista | | Dedicated software should be used. Applicable OS: Windows® 2000/XP/Vista | | | | | |
| Touch key resolution | Free layout (8 dots min.) | | | | | | | |
| Touch key operation force | 0.8 N max. | | | | | | | |
| Touch key life | 1 million operations min. (at 25°C) | | | | | | | |
| COM. Port — Communication standard | Conforms to RS232C | Conforms to RS422 | Conforms to RS232C | Conforms to RS422 | Conforms to RS232C | Conforms to RS422 | Conforms to RS232C | Conforms to RS422 |
| COM. Port — External communication conditions | Baud rate: 9,600/19,200/38,400/57,600/115,200 bps | | | | | | | |
| | Data bits: 7 or 8 bits, Parity: None, Odd, Even, Stop bits: 1 bit | | | | | | | |
| COM. Port — Protocol | Our FP series supported/General-purpose serial interface supported/Other companies' PLC supported (Refer to the compatible PLC list for manufacturers and models.) | | | | | | | |
| COM. Port — Connector | Connector terminal base (8 pins) | | | | | | | |
| Screen data transfer interface — Communication standard | Tool port (Conforms to RS232C) | | USB1.1 | | | | | |
| Screen data transfer interface — Communication conditions with personal computers | Baud rate: 9,600/19,200/115,200/230,400 bps*6 Data bits: 8 bits, Parity: None, Odd, Even, Stop bits: 1 bit | | — | | | | | |
| Screen data transfer interface — Protocol | Our dedicated protocol | | | | | | | |
| Screen data transfer interface — Connector | 5-pin mini-DIN | | USB TYPE-B | | | | | |
| Screen data transfer interface — Ethernet port*9 | — | | | | | | Yes (100BASE-TX, 10BASE-T) *7, *8 | |
| User's memory | F-ROM | | | | | | | |
| Memory capacity | 6.5 Mbyte | | 2 Mbyte | | 12 Mbyte (Ver.1.10 or later) | | | |
| Memory | SRAM | | | | | | | |
| Memory backup | Lithium battery (replaceable) CR2032, commercially available *Does not come with product. | | Lithium battery (replaceable) AFPX-BATT *Does not come with product. | | | | | |

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

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