Panasonic

ideas for life

Programmable Display

GT series

GT01
GT11
New GT21
GT30

GT series becoming more visible and compact

GT30M
5.7 inch
320×240 dots
STN monochrome LCD
CFL backlight
Matrix switch
RS232C

GT30C
5.7 inch
320×240 dots
STN color LCD
16 colors
CFL backlight
Matrix switch
RS232C

GT21C New
4.7 inch
320×240 dots
STN color LCD
256 colors
White LED backlight
Analog-touch panel
RS232C/RS422·RS485

GT11
4 inch
240×96 dots
3 color LED backlight/
White LED backlight
Analog-touch panel
RS232C/RS422·RS485

GT01
3 inch
128×64 dots
3 color LED backlight/
White LED backlight
Analog-touch panel
RS232C/RS422·RS485

Programmable Display GT Series
ARCT1B267E '06.1

New

http://www.nais-e.com/plc/
Panasonic... the new name for NAiS

Matsushita Electric Works, Ltd.

The new 4.7-inch STN 256-color touch panel displays clear and beautiful images.

Programmable Display
GT21C

4.7 inch color | STN 256 colors | White LED backlight | 32 chars. ×24 lines | 320× 240 dots | Free switch layout (8×8 dots min) | RS232C/ RS422 (RS485) | Through function | 24V DC

CE

Beautiful

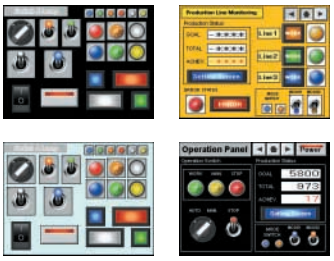
Beautiful images

4.7-inch
STN 256 colors
QVGA

The image quality is equivalent to the 5.7-inch type display, which it can replace.

Hairline silver

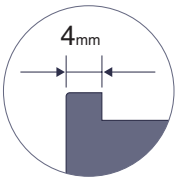
Top quality images in small-sized panels



The new 3D-design buttons provide higher visibility and operability.

Sophisticated body design

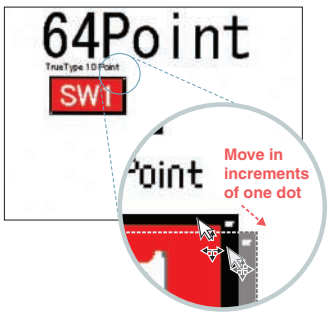
- The simple & beautiful design fits a variety of installation locations without spoiling the design of the target equipment.
- The projection from the target equipment surface is as low as 4 mm, allowing for a beautiful finish.
- The total depth is the industry's lowest at 29.9 mm (excluding the projection).

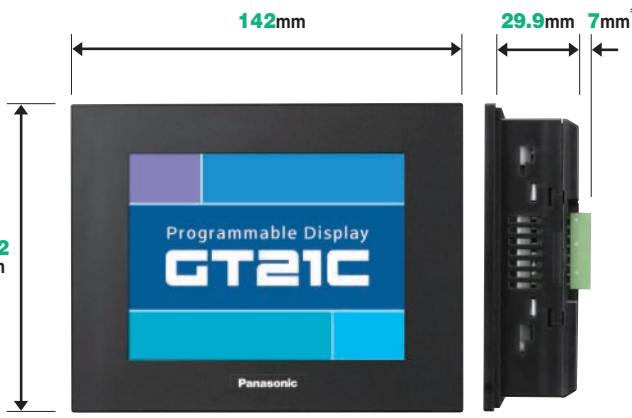


Simple

High operability achieved by the customizable screen layout

- The analog-touch design allows you to freely adjust the screen layout in increments of one dot.
- You can also freely choose TrueType font character sizes and arrangement.





Pure black

Useful

Maintenance-free white LED backlight

- The use of the white LED backlight eliminated backlight replacement work.

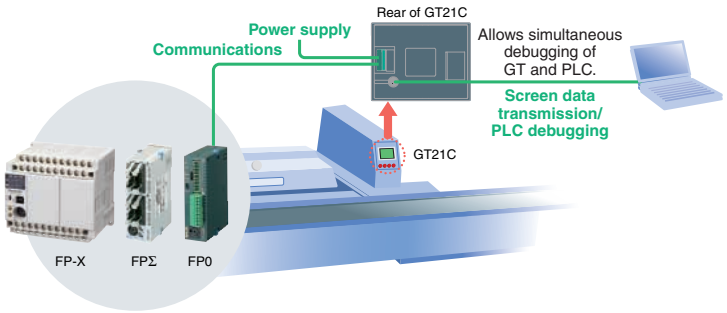
Environmentally friendly lower power consumption design

- Lower power consumption of 4.8 W or less: Approx. 50% of our conventional model (GT30)

Simple connection and maintenance

The through function improves the convenience in combination with our FP series PLC.

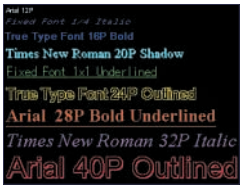
Simultaneous operation of GT data transfer and PLC debugging will be available by connecting your GT to a personal computer and our FP series PLC.



Great diversity and variety of use

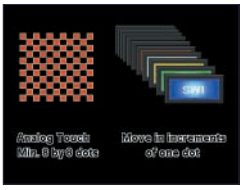
The 4.7-inch screen provides a wide variety of display functions that improve the workability for operators.

“TrueType fonts”



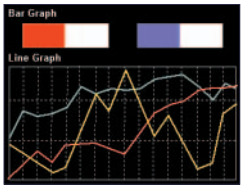
With the TrueType fonts, the screen can display up to 768 characters at a time (32 chars. x 24 lines) and therefore be used effectively.

“Analog-touch design”



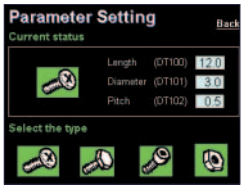
You can freely position switches as small as 8 x 8 dots.

“Graph function”



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

“Recipe function”

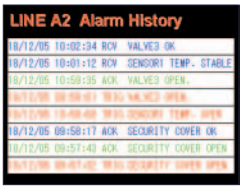


Settings by product item and other data (up to 3,600 words) can be transferred to PLC, simplifying PLC programming.

“Flow Display function”

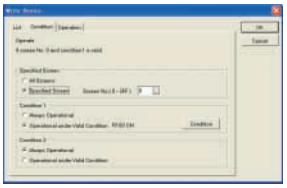
A flowing message of up to 64 characters (two-byte) can be displayed at the bottom of the screen. (128 messages)

“Alarm list”



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

“Write Device function”



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

The language switching function facilitates PLC programming and screen switching.

Conventionally, screens were created for each language. With this new language switching function, data can be entered in all available languages for each part. The same screens can be created all at once, and ladder diagram creation is also easier.

画...	部...	日本語	英語	簡体字中国語	繁体字中国語	韓国語
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	안녕하
000	SW1	1	1	1	1	1
000	SW1	2	2	2	2	2

■ Available languages *2

Japanese, English, European (German, French, Italian, Spanish, etc.), Simplified Chinese, Traditional Chinese, Korean, Turkish (NEW)

There are two types of communication (RS232C/RS422). Connection with PLCs of a variety of manufacturers is possible. (Please refer to the compatible PLC list.)

The 24-V RS422 type can be connected at a maximum distance of 500m.

*1: Note that the COM port connector projects 7 mm. Also take the cable diameter into account.
*2: If your operating system is Windows 2000 or XP, the above languages can be displayed on one screen at a time.
With other operating systems, the screen creation tool “Terminal GTWIN English Version” is required, and the operating system’s language must be the one you want to display.

- The panel face protection sheet for GT21C is available as an option.
- To use the internal clock function, buy a commercially available battery (CR2032).

The upgraded 4-inch wide screen provides clearer images with higher visibility.

Compact Programmable Display

GT11

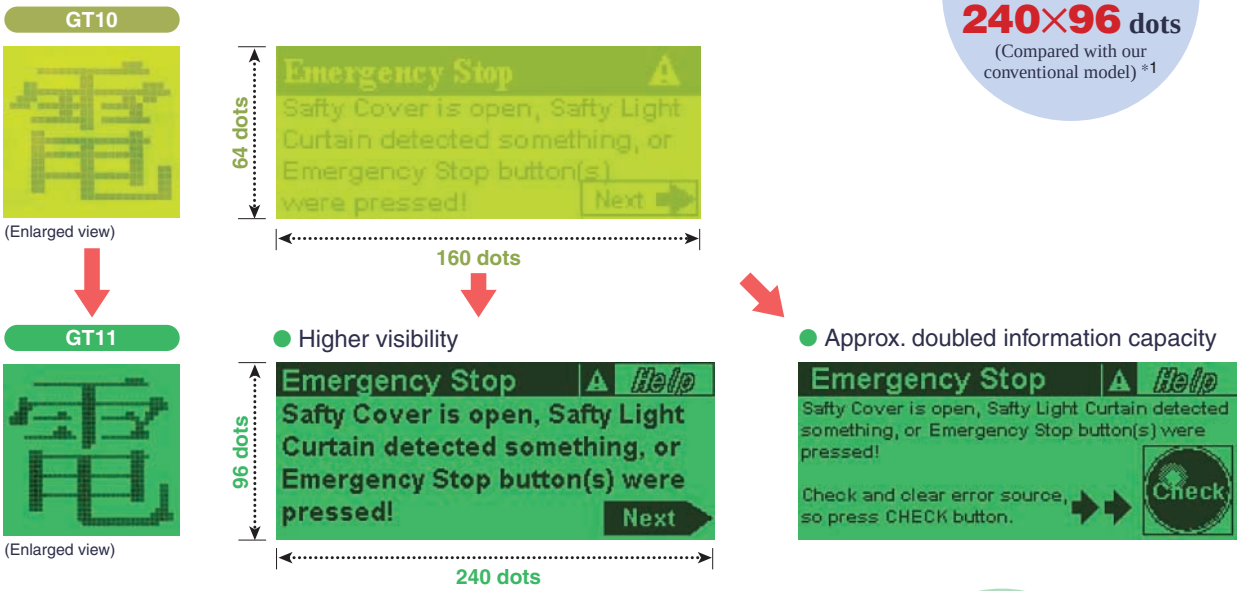
4 inch mono-chrome | 3 color LED | 24 chars. ×9 lines | 240×96 dots | Free switch layout (8×8 dots min) | RS232C/ RS422 (RS485) | Through function | 24V DC

CE cULus *6

Clear × Bright = Easy to use

The 4-inch wide screen consists of a high-definition LCD, which increases the information capacity.

Number of dots
2.25 times
240×96 dots
(Compared with our conventional model) *1

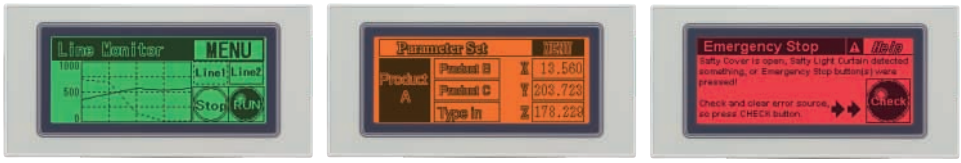


Display of a highly visible equipment status achieved by the 3-color LEDs. The equipment appearance will be improved.

The bright and easy-to-read LCD indicates messages, graphics, switches, lamps, PLC data, graphs, clocks*2, and others in any layout you want. In addition, three backlight colors can be selected according to the equipment status. This allows you to identify the status at a glance.

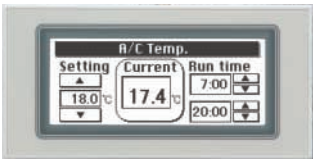
70% brighter
(than our conventional model) *1

Normal (Green) | In operation (Orange) | Emergency (Red)



3-color LED Backlight Type

NEW



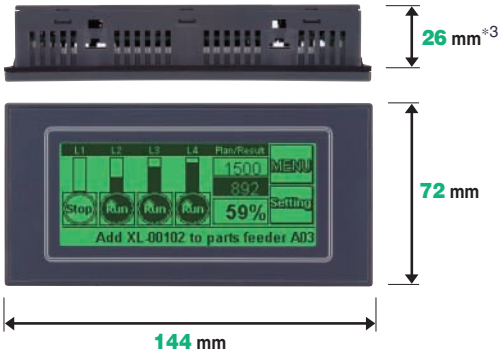
White LED Backlight Type

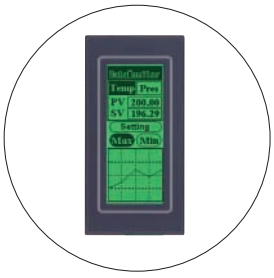
Cost and space saving

Mountable in tight places

Costs can be reduced by using this model instead of a mid-size display.

Approx. 20% thinner *1

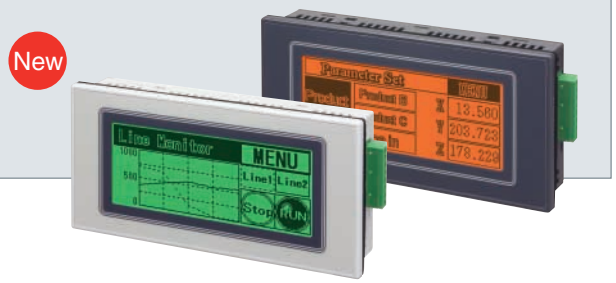




Display in portrait orientation is also available.

Compatible with our conventional GT10 model.

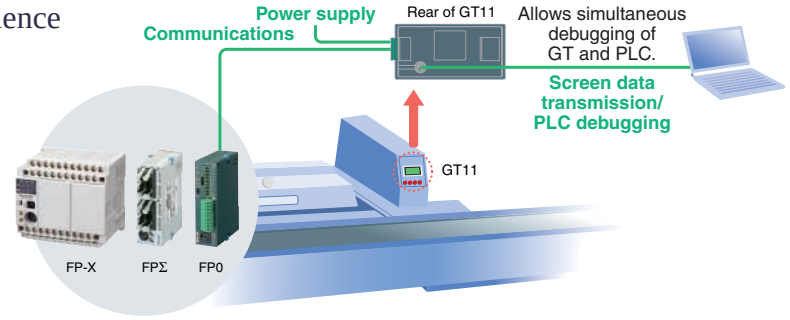
Exchangeable since the panel cut dimensions are identical, and screen data exchange is also possible.*4



Simple connection and maintenance

The through function improves the convenience in combination with our FP series PLC.

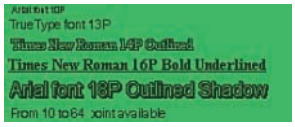
Simultaneous operation of GT data transfer and PLC debugging will be available by connecting your GT to a personal computer and our FP series PLC.



Great diversity and variety of use

The 4-inch wide screen provides a wide variety of display functions that improve the workability for operators.

"TrueType fonts"

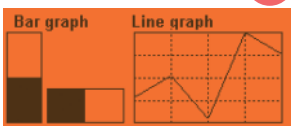


With the TrueType fonts, the screen can display up to 216 characters at a time (24 chars. x 9 lines) and therefore be used effectively.

"Analog-touch design" NEW

You can freely position switches as small as 8 x 8 dots.

"Graph function" Up-graded

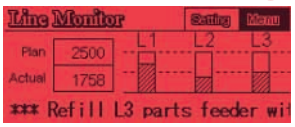


You can identify the production or operation status in line or bar graph form.

"Recipe function" NEW

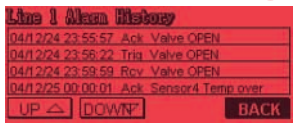
Settings by product item and other data (up to 3,600 words) can be transferred to PLC, simplifying PLC programming.

"Flow Display function" NEW



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

"Alarm list" NEW



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

"Write Device function" NEW

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

The language switching function facilitates PLC programming and screen switching.

Conventionally, screens were created for each language. With this new language switching function, data can be entered in all available languages for each part. The same screens can be created all at once, and ladder diagram creation is also easier.

画...	部...	日本語	英語	簡体字中国語	繁体字中国語	韓国語
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	안녕하
000	SW1	1	1	1	1	1
000	SW1	2	2	2	2	2

■ Available languages *5

There are two types of communication (RS232C/RS422). Connection with PLCs of a variety of manufacturers is possible. (Please refer to the compatible PLC list.)

The 24-V RS422 type can be connected at a maximum distance of 500m.

The use of high-brightness LEDs eliminated backlight replacement work.

*1: Compared with GT10.
*2: To use the internal clock function, buy a commercially available battery (CR2032).
*3: When the panel thickness is 5 mm, the screw head of the mounting bracket protrudes 2 mm.
● The panel face protection sheet for GT11 is available as an option.
*4: The mounting bracket is different. When converting the screen data, the font size will not be automatically converted.
*5: If your operating system is Windows 2000 or XP, the above languages can be displayed on one screen at a time. With other operating systems, the screen creation tool "Terminal GTWIN English Version" is required, and the operating system's language must be the one you want to display.
*6: UL/cUL marking is not available to white LED backlight type.

Ultra compact size with all the features required for control panels

Compact Programmable Display

GT01

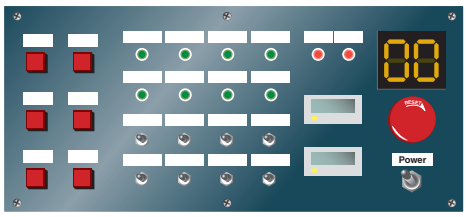
3 inch mono-chrome | 3 color LED | 12 chars. ×6 lines | 128×64 dots | Free switch layout (8×8 dots min) | RS232C/ RS422 (RS485) | Through function | 5V DC/ 24V DC

CE*1 cULus

Cost and space saving

GT01 is a shortcut to cost reduction.

Eliminates the need for component arrangement, component inventory, and man-hours for wiring.



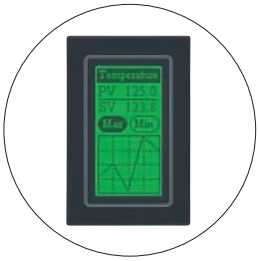
Total cost 1/5*2

Improves the design and operability.

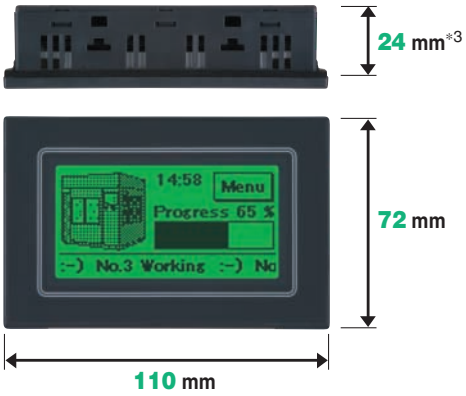
Easy to change the settings by model and user.

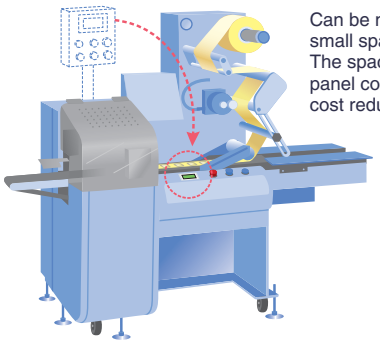
Can be mounted in small spaces.

The ultra-thin body with a depth of only 24 mm*3 fits in any space.



Display in portrait orientation is also available.





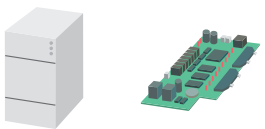
Can be mounted in any small space.
The space saving control panel contributes to total cost reduction.

Simple connection and maintenance

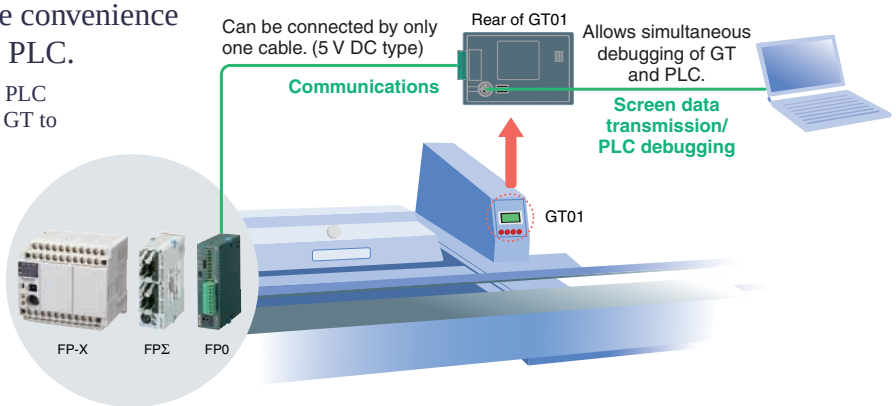
The through function improves the convenience in combination with our FP series PLC.

Simultaneous operation of GT data transfer and PLC debugging will be available by connecting your GT to a personal computer and our FP series PLC.

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



Other company's PLC | Microprocessor board



Only one cable is required to connect your GT directly to our FP series or Mitsubishi Electric FX series, substantially reducing the man-hours for wiring. (5 V DC type)

Only one cable is required because power is supplied through the TOOL port of the PLC.

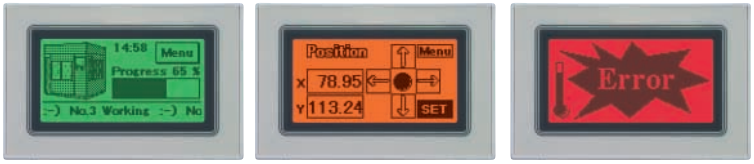
High visibility and multiple functions

Display of a highly visible equipment status achieved by the 3-color LEDs. The equipment appearance will be improved.

The bright and easy-to-read LCD indicates messages, graphics, switches, lamps, PLC data, graphs, clocks*4, and others in any layout you want. In addition, three backlight colors can be selected according to the equipment status. This allows you to identify the status at a glance.

70% brighter
(than our conventional model) *5

Normal (Green) | In operation (Orange) | Emergency (Red)



3-color LED Backlight Type

NEW

White LED Backlight Type

Displays as small as three inches provide a wide variety of display functions that improve the workability for operators.

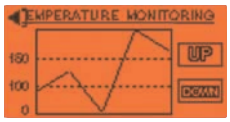
"TrueType fonts"

With the TrueType fonts, the screen can display up to 72 characters at a time (12 chars. x 6 lines) and therefore be used effectively.

"Analog-touch design"

You can freely position switches as small as 8 x 8 dots.

"Graph function"



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

"Recipe function"

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

"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 "write device function" reduces your workload for creating PLC ladder diagrams.

This function writes values in the PLC or turns bits on/off according to the PLC status or the screen No.

Usefulness

The language switching function facilitates PCL programming and screen switching.

Conventionally, screens were created for each language. With this new language switching function, data can be entered in all available languages for each part. The same screens can be created all at once, and PLC programming is also easier.

画...	部...	日本語	英語	簡体字中国語	繁体字中国語	韓国語
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	안녕하
000	SW1	1	1	1	1	1
000	SW1	2	2	2	2	2

■ Available languages *6

Japanese | English | European (German, French, Italian, Spanish, etc.)

NEW

Simplified Chinese | Traditional Chinese | Korean | Turkish

There are two types of power supplies (5 V DC/24 V DC) and two types of communication (RS232C/RS422). Connection with PLCs of a variety of manufacturers is possible.

The 24-V RS422 type can be connected at a maximum distance of 500m. (Please refer to the compatible PLC list.)

The use of high-brightness LEDs eliminated backlight replacement work.

*1: CE marking is not available to AIGT0032B1(H1), AIGT0132B1(H1).
*2: Compared with our products. Not guaranteed in all cases.
*3: When the panel thickness is 5 mm, the screw head of the mounting bracket protrudes 4 mm.
*4: Refers to and displays external clock data. (Not provided with a built-in clock function.)
● The panel face protection sheet for GT01 is available as an option.

*5: Compared with GT10.
*6: If your operating system is Windows® 2000 or XP, the above languages can be displayed on one screen at a time.
With other operating systems, the screen creation tool "Terminal GTWIN English Version" is required, and the operating system's language must be the one you want to display.
*7: UL/cUL marking is not available to white LED backlight type.

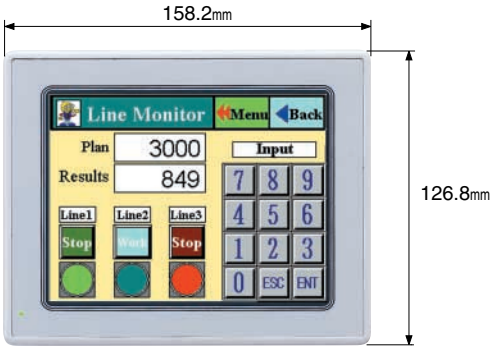
The 5.7-inch STN color screen dresses up the control panel.

Medium Size Programmable Display **GT30**

5.7 inch STN color/ monochrome | 16 colors (GT30C) | White/ Blue (GT30M) | 32 chars. ×24 lines | 320× 240 dots | Matrix switch 16×12 | RS232C | Through function | 24V DC

Bright and highly visible display

Both the 16-color type and the blue monochrome type provide top brightness in the mid-size range.



Beautiful TrueType font characters

With TrueType fonts, the screen displays beautiful characters.
A wide range of character sizes can be selected from 10 x 10 dots to 64 x 64 dots, allowing flexible screen designs.

Compact body with a 41-mm depth and a narrow frame

The depth is only 41 mm. This thin body saves space for installation.
The LCD frame is also narrow, contributing to the total size reduction of the body.

Long-life backlight

The backlight can last as long as 50,000 hours (at room temperature and humidity).
You have almost no need to replace the backlight. Of course, the backlight can be replaced on site.

Alarm list for record management

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

Features a pass-through function useful for debugging

The device wiring function reduces your workload for creating PLC ladder diagrams.

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

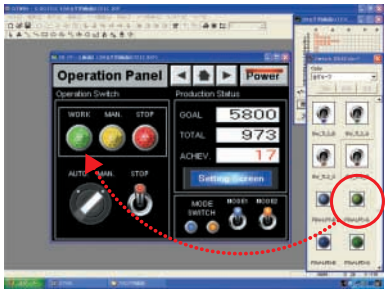
The user-friendly interface makes screen creation easier.

Screen Creation Tool for the GT Series Terminal **GTWIN Ver.2**

WIN 95 | WIN 98/Me | WIN 2000 | WIN NT | WIN XP | Required disk space 100 MB min

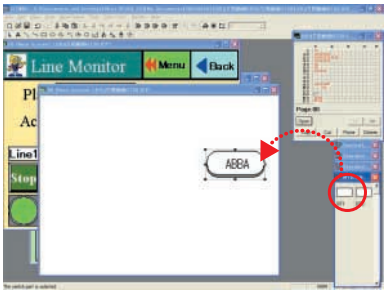
Simply drag and drop parts.

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



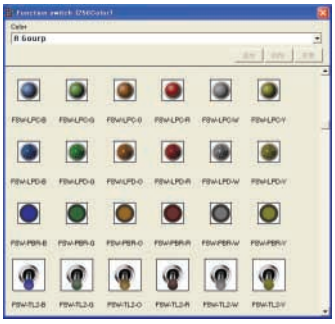
Just drag and drop your original parts to be registered.

You can also register your preset original parts easily by drag-and-drop operations.



More user-friendly parts libraries (from Ver. 2.7)

In the previous version, the required parts library had to be selected from the menu every time it was needed. The new version displays a list of parts libraries, making them more user-friendly.

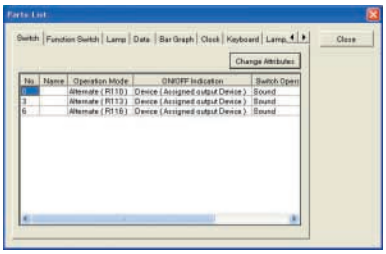


256-color 3D buttons (for GT21C)

3D-design buttons with higher visibility and operability are available.

What a useful function! - Batch parts editing

You can display an attribute list of parts placed on screens and directly modify them in the list.



Screen copy in bitmap form

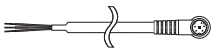
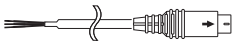
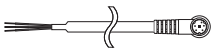
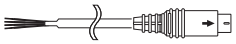
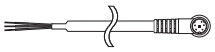
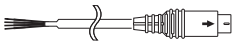
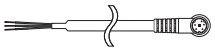
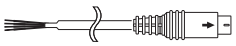
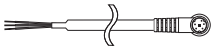
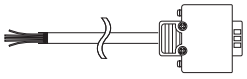
You can output screen images in bitmap form and use them in off-the-shelf applications. This is useful for preparing equipment operation manuals.

Firmware upgrading function (GT01/GT11/GT21C)

Before transferring screen data, tick “Automatic firmware update” to automatically upgrade the display if the display version is older than the firmware version in GTWIN.
You can keep the firmware version upgraded by using the latest version of GTWIN.

You can download a trial version of GTWIN Ver. 2 from the following Website. (Login as NAIS FAN members is required.)
http://www.nais-e.com/plc/uacs/plc_dl_soft.html

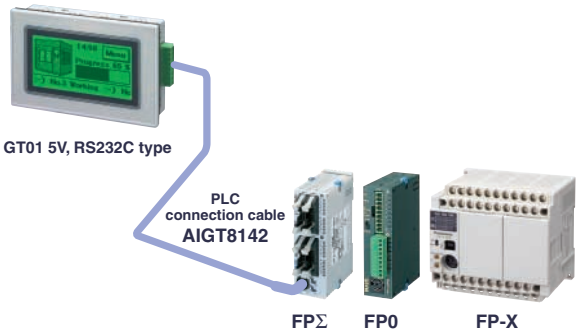
System Configuration and Options

Model	Rated voltage	Communi-cation port	Order No.		PLC connection cable
GT01	5V DC	RS232C	 <Ash gray> Order No.: **AIGT0030H1**	 <Black> Order No.: **AIGT0030B1**	 Cable (2 m) for direct connection to the TOOL port of FP-e/FP0/FPΣ/FP2/FP2SH/FP-M 5-pin mini-DIN connector — 4 single wires + Shielding wire Order No.: **AIGT8142** Note: This cable is for GT01, and power is supplied through the TOOL port.
		RS422 (RS485*)	 <Ash gray> Order No.: **AIGT0032H1**	 <Black> Order No.: **AIGT0032B1**	 Cable (2 m) for direct connection to the Mitsubishi Electric FX Series 8-pin mini-DIN connector — 6 single wires Order No.: **AIGT8152** Note: This cable is for GT01, and power is supplied through the TOOL port
	24V DC	RS232C	 <Ash gray> Order No.: **AIGT0030H**	 <Black> Order No.: **AIGT0030B**	 Cable (2 m) to connect GT01 (24 V DC type) to our PLC 5-pin mini-DIN connector — 3 single wires + Shielding wire Order No.: **AIGT8162** (The 5 m and 10 m types are also available.)
		RS422 (RS485*)	<Ash gray> Order No.: **AIGT0032H**	<Black> Order No.: **AIGT0032B**	 Order No.: **AIGT8175**
GT11	24V DC	RS232C	 <Ash gray> Order No.: **AIGT2030H**	 <Black> Order No.: **AIGT2030B**	 Cable (2 m) to connect GT11 to our PLC 5-pin mini-DIN connector — 3 single wires + Shielding wire Order No.: **AIGT8162** **AIGT8165 (5 m)** and **AIGT8160 (10 m)** are also available.
		RS422 (RS485*)	 <Ash gray> Order No.: **AIGT2032H**	 <Black> Order No.: **AIGT2032B**	 Cable (5 m) for connection to the Mitsubishi Electric FX Series 8-pin mini-DIN connector — 4 single wires Order No.: **AIGT8175**
GT21C	24V DC	RS232C	 <Silver> Order No.: **AIGT2230H**	 <Black> Order No.: **AIGT2230B**	 Cable (2 m) to connect GT11 to our PLC 5-pin mini-DIN connector — 3 single wires + Shielding wire Order No.: **AIGT8162** **AIGT8165 (5 m)** and **AIGT8160 (10 m)** are also available.
		RS422 (RS485*)	 <Silver> Order No.: **AIGT2232H**	 <Black> Order No.: **AIGT2232B**	 Cable (5 m) for connection to the Mitsubishi Electric FX Series 8-pin mini-DIN connector — 4 single wires Order No.: **AIGT8175**
GT30M	24V DC	RS232C	 <Ash gray, STN monochrome LCD> Order No.: **AIGT3100H**	 <Black, STN monochrome LCD> Order No.: **AIGT3100B**	 Cable (2 m) for connection to the TOOL port of FP-e/FP0/FPΣ/FP2/FP2SH/FP-M 5-pin mini-DIN connector — 3 single wires Order No.: **AIGT8192**
GT30C			 <Ash gray, STN color LCD> Order No.: **AIGT3300H**	 <Black, STN color LCD> Order No.: **AIGT3300B**	 Cable (2 m) for connection to the COM. port of FP1/FP2/FP2SH/FP-M/FP10SH, TOOL port of FP10SH, and computer communication unit of FP2/FP3 9-pin D-SUB connector — Open wire Order No.: **AIP81842**

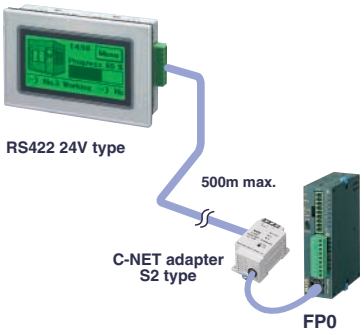
* For connection by RS485, refer to the Manual.

Connection examples

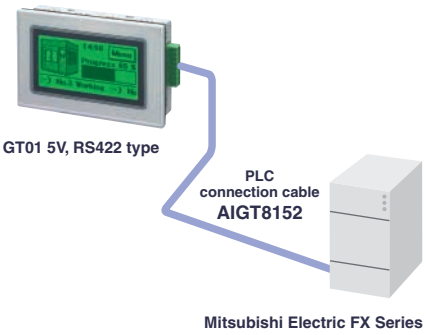
1. Connection with FPΣ/FP0



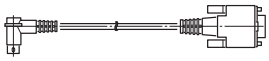
2. Distant connection with FP0



3. Connection with Mitsubishi Electric FX Series



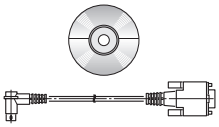
Screen data transmission cable (for DOS/V computers)



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

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

Terminal GTWIN Ver.2



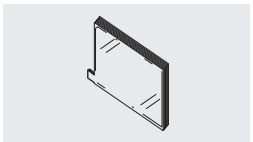
English Version Tool Kit includes:
GTWIN CD-ROM
GT Series Hardware manual (English Version)
Order No.: **AIGT8001V2**

Japanese Version Tool Kit includes:
GTWIN CD-ROM
Screen data transmission cable (AFC8503)
GT Series Introduction Manual
Order No.: **AIGT8000V2**

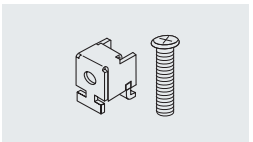
Upgrade Version (English)
Upgrades Terminal GTWIN
Ver. 1 to Ver. 2.
Order No.: **AIGT8001V2R**

Upgrade Version (Japanese)
Upgrades Terminal GTWIN
Ver. 1 to Ver. 2.
Order No.: **AIGT8000V2R**

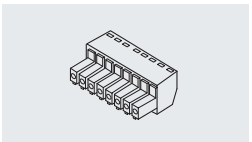
Options



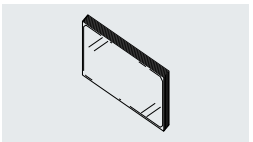
■GT01 panel face protection sheets
GT01 panel face protection sheets
(option)
10 sheets in a set
Order No.: **AIGT080**



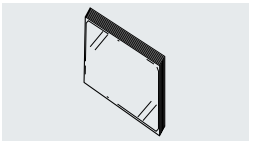
■GT01/GT11 mounting parts
5 sets of GT01/GT11 mounting parts
(Package includes one set.)
(4 parts/set)
Order No.: **AIGT083**



■GT01/GT11 connectors
GT01/GT11 COM. port connectors
5 connectors in a set
(One piece is installed on main unit.)
Order No.: **AIGT084**

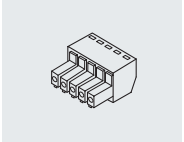


■GT11 panel face protection sheets
GT11 panel face protection sheets
(option)
10 sheets in a set
Order No.: **AIGT280**

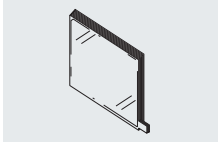


■GT21C panel face protection sheets
GT21C panel face protection sheets
(option)
10 sheets in a set
Order No.: **AIGT28021**

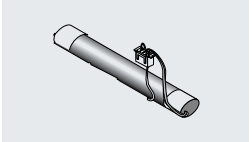
■GT21C mounting parts
5 sets of GT21C mounting parts
(2 parts/set)
(Package includes one set.)
Order No.: **AIGT38321**



■GT30 connectors
GT30 COM. port connectors
5 connectors in a set
(One piece is installed on main unit.)
Order No.: **AIGT184**

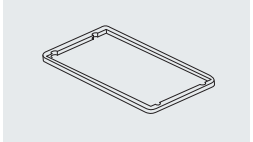


■GT30 panel face protection sheets
GT30 panel face protection sheets
(for replacement)
10 sheets in a set
(One sheet is installed on main unit.)
Order No.: **AIGT380**



■GT30 replacement backlight
Replacement backlight for GT30
color/monochrome LCD
Order No.: **AIGT382**

■GT30 mounting parts
5 sets of GT30 mounting parts
(2 parts/set)
(Package includes one set.)
Order No.: **AIGT383**



■Waterproof packing
Waterproof packing (for replacement),
10 pieces in a set
(One sheet is installed on main unit.)
GT01 Order No.: **AIGT081**
GT11 Order No.: **AIGT181**
GT21 Order No.: **AIGT28121**
GT30 Order No.: **AIGT381**

Specifications and Product Types

Specifications

Item		GT01 specifications				GT11 specifications		GT21C specifications		GT30 specifications	
		5V/RS232C	5V/RS422	24V/RS232C	24V/RS422	RS232C	RS422	RS232C	RS422	Monochrome LCD type	Color LCD type
Rated voltage		5 V DC		24 V DC							
Operating voltage range		4.5 to 5.5 V DC		21.6 to 26.4 V DC							
Power consumption		1W max.	1.1W max.	2W max.		2.4W max.		4.8W max.		10W max.	
Ambient temperature		0 to 50°C				0 to 50°C		0 to 50°C *1		0 to 50°C *2	
Ambient humidity		20% RH to 85% RH (No dew condensation)									
Storage temperature		-20°C to 60°C									
Storage humidity		10% RH to 85% RH (No dew condensation)									
Vibration resistance		10 Hz 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) ∗ AIGT0030B1/AIGT0030H1: When the ferrite device supplied with our PLC connection cable (AIGT8142) is mounted									
Environmental resistance		IP65 (in the initial stages) Dust-proof and drip-proof from the front of the panel only (Rubber packing is attached to the panel contact surface.) ∗ When reattaching the panel, replace the waterproof packing.									
Mass		Approx. 160 g				Approx. 230 g		Approx. 330 g		Approx. 440 g	
Display	Display device	STN monochrome LCD				STN monochrome LCD		STN color LCD		STN monochrome LCD	STN color LCD
	Resolution	128 (W) x 64 (H) dots				240 (W) x 96 (H) dots		320 (W) x 240 (H) dots		320 (W) x 240 (H) dots	
	Display color	Two colors (black/white)				Two colors (black/white)		256 colors		Two colors (blue/white)	16 colors
	Displayable area	70.38 (W) x 35.18 (H) mm				96.0 (W) x 38.4 (H) mm		98.0 (W) x 74.0 (H) mm		117 (W) x 88 (H) mm	
	Backlight	3-color LED backlight (green, red, orange)/White LED backlight ∗ No need for replacement						White LED backlight		CFL ∗ Average life: 50,000 hours (25°C)	
Functions	Font types	Fixed font: 8 x 8, 16 x 8, and 16 x 16 dots Characters can be displayed in the original, doubled, or quadrupled width or height. TrueType fonts, Windows TrueType fonts									
	Languages	Japanese, English, European languages, Simplified Chinese, Traditional Chinese, Korean									
	Graphics	Straight lines, continuous straight lines, squares, circles, ovals, arcs, elliptic arcs, fan shapes, elliptic fan shapes, beveled squares, bitmaps									
	Number of screens	Approx. 160 screens Screen No. that can be set: Base screens No. 00 to FF				Approx. 250 screens Screen No. that can be set: Base screens No. 00 to 3FF				Approx. 220 screens (Monochrome LCD type) Approx. 160 screens (Color LCD type) Screen No. that can be set: Base screens No. 00 to 3FF	
		The number of screens that can be registered varies according to the registered contents.									
	Part functions	Messages, lamps, switches, data, bar graphs, clocks (∗), keyboards, and line graphs				Messages, lamps, switches, data, bar graphs, clocks, keyboards, line graphs, and alarm list parts					
	Other functions	Recipe, flow display, write device, and language switching				Recipe, flow display, write device, and language switching				Recipe, message scrolling, and write device	
	Clock function	Refers to and displays external clock data. (Not provided with a built-in clock function.)				Provided with a built-in clock function. (Can also refer to and display a PLC clock.) ∗ For GT11, GT21C buy a commercially available battery					
	Contrast adjustment	Contrast can be adjusted by using the touch panel.									
	Automatic communication settings	The communication conditions of dedicated software and PLC can be automatically set by connecting a cable.									
	Debugging function	Through function (PLC can be debugged from a personal computer by connecting the computer to the TOOL port and the PLC to the COM. port.)									
	Screen creation	Dedicated software should be used. Applicable OS: Windows® 95 (OSR2 or later)/98/Me/2000/NT/XP									
Touch key resolution		Free layout (8 dots min)								16 (W) x 12 (H)	
Touch key operation force		0.5 N max.				0.5 N max.		0.8 N max.		0.98 N max.	
Touch key life		1 million operations min									
COM. port	Communication standard	Conforms to RS232C	Conforms to RS422	Conforms to RS232C	Conforms to RS422	Conforms to RS232C	Conforms to RS422	Conforms to RS232C	Conforms to RS422	Conforms to RS232C	
	External communication conditions	Baud rate: 9,600/19,200/ 38,400/57,600/115,200 bits/s				Baud rate: 9,600/19,200/ 38,400/57,600/76,800/115,200 bits/s		Baud rate: 9,600/19,200/ 38,400/57,600/115,200 bits/s		Baud rate: 9,600/19,200/ 38,400/57,600/115,200 bits/s	
		Data bits: 7 or 8 bits Parity: None, Odd, Even Stop bits: 1 bit									
	Protocol	Our FP series supported/General-purpose serial interface supported/Other companies' PLC supported (Refer to the compatible PLC list for manufacturers and models.)									
	Connector	Connector terminal base (8 pins)								Connector terminal base (5 pins)	
TOOL port	Communication standard	Conforms to RS232C									
	Communication conditions with personal computers	Baud rate: 9,600/19,200/115,200 bits/s Data bits: 8 bits Parity: None, Odd, Even Stop bits: 1 bit									
	Protocol	Our dedicated protocol									
	Connector	5-pin mini-DIN									

*1 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.
*2 When the unit is being installed in a horizontal orientation and FP programmer II is being connected to the TOOL port, the usable range is 0 to +40°C.

Conformance to the UL/cUL standards

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

Memory

Screen data and GTWIN configuration setting data

Item	GT01 specifications	GT11 specifications	GT21C specifications	GT30 specifications	
				Monochrome LCD type	Color LCD type
User's memory	F-ROM	F-ROM	F-ROM	F-ROM	F-ROM
Memory capacity	384 KB	1.375 MB	6.5 MB	1.5 MB	3.25 MB

Clock data and PLC device storage data (24 words max.)

Item	GT01 specifications	GT11 specifications	GT21C specifications	GT30 specifications
Memory	—	SRAM		SRAM
Memory backup	—	Lithium battery (replaceable) CR2032, commercially available * Not included. Buy it separately.		Lithium battery (replaceable) CR2032, commercially available (included)

Models and prices

Produce name	Description				Order No.
GT01: Main unit	STN monochrome LCD	5 V DC	RS232C type	Black	AIGT0030B1
				Ash gray	AIGT0030H1
			RS422/RS485 type	Black	AIGT0032B1
				Ash gray	AIGT0032H1
		24 V DC	RS232C type	Black	AIGT0030B
				Ash gray	AIGT0030H
			RS422/RS485 type	Black	AIGT0032B
				Ash gray	AIGT0032H
GT11: Main unit	STN monochrome LCD	24 V DC	RS232C type	Black	AIGT2030B
				Ash gray	AIGT2030H
			RS422/RS485 type	Black	AIGT2032B
				Ash gray	AIGT2032H
GT21C: Main unit	STN color LCD	24 V DC	RS232C type	Black	AIGT2230B
				Silver	AIGT2230H
			RS422/RS485 type	Black	AIGT2232B
				Silver	AIGT2232H
GT30: Main unit	STN monochrome LCD	24 V DC	RS232C type	Black	AIGT3100B
				Ash gray*	AIGT3100H
	STN color LCD		RS232C type	Black	AIGT3300B
				Ash gray*	AIGT3300H
Terminal GTWIN Ver. 2 Japanese Version Tool Kit	Composed of: • Screen creation tool "Terminal GTWIN Ver. 2 Japanese Version" (CD-ROM) • Screen transmission cable (AFC8503, for DOS/V computers) • GT Series Introduction Manual (Japanese Version)				AIGT8000V2
Terminal GTWIN Ver. 2 English Version	Composed of: • Screen creation tool "Terminal GTWIN Ver. 2 English Version" (CD-ROM) • GT Series Hardware Manual (English Version)				AIGT8001V2
Terminal GTWIN Upgrade Version	Upgrades the screen creation tool "Terminal GTWIN Ver. 1" to "Ver. 2".			Japanese Version	AIGT8000V2R
				English Version	AIGT8001V2R
PLC direct connection cable	Cable (5-pin mini-DIN connectors, 2 m) for direct connection between GT01 (5 V DC/RS232C type) and the TOOL port of our PLC (FP-e/FPS/FPS/FP2/FP2SH/FP-M)				AIGT8142
	Cable (8-pin mini-DIN connectors, 2 m) for direct connection between GT01 (5 V DC/RS422 type) and the Mitsubishi Electric FX Series				AIGT8152
	Cable (8-pin mini-DIN connectors, 5 m) for direct connection between GT11/GT21 (RS422 type) and the Mitsubishi Electric FX Series				AIGT8175
PLC connection cable	Cable (One end: 5-pin mini-DIN connector, The other end: Open wire, 2 m) to connect GT01 (24 V DC type)/GT11/GT21 to our PLC				AIGT8162
	Cable (One end: 5-pin mini-DIN connector, The other end: Open wire, 5 m) to connect GT01 (24 V DC type)/GT11/GT21 to our PLC				AIGT8165
	Cable (One end: 5-pin mini-DIN connector, The other end: Open wire, 10 m) to connect GT01 (24 V DC type)/GT11/GT21 to our PLC				AIGT8160
	Cable (One end: 5-pin mini-DIN connector, The other end: Open wire, 2 m) for direct connection between GT30 and the TOOL port of our PLC (FP-e/FP0/FPS/FP2/FP2SH/FP-M)				AIGT8192
	Cable (One end: 9-pin D-SUB connector, The other end: Open wire, 2 m) for connection to the COM. port of FP1/FP2/FP2SH/FP-M/FP10SH, TOOL port of FP10SH, and computer communication unit of FP2/FP3				AIP81842
Screen transmission cable	Screen data transmission cable between GTWIN and GT series displays (One cable is included in the Terminal GTWIN Ver. 2 Japanese Version Tool Kit.)				AFC8503
	Screen data transmission cable (5-pin mini-DIN straight type) between GTWIN and GT series displays				AFC8503S
Panel face protection sheets	GT01 panel face protection sheets 10 sheets in a set (option)				AIGT080
	GT11 panel face protection sheets (for replacement) 10 sheets in a set				AIGT280
	GT21C panel face protection sheets (for replacement) 10 sheets in a set				AIGT28021
	GT30 panel face protection sheets (for replacement) 10 sheets in a set * One sheet is factory-attached to the GT panel.				AIGT380
Waterproof packing	GT01 waterproof packing (for replacement) 10 pieces in a set * One piece is factory-attached to the GT panel.				AIGT081
	GT11 waterproof packing (for replacement) 10 pieces in a set * One piece is factory-attached to the GT panel.				AIGT181
	GT21C waterproof packing (for replacement) 10 pieces in a set * One piece is factory-attached to the GT panel.				AIGT28121
	GT30 waterproof packing (for replacement) 10 pieces in a set * One piece is factory-attached to the GT panel.				AIGT381
Replacement backlight	Replacement backlight for GT30 color/monochrome LCD				AIGT382
Mounting parts	5 sets of GT01/GT11 mounting parts (4 parts/set)				AIGT083
	5 sets of GT21C mounting parts (4 parts/set)				AIGT28321
	5 sets of GT30 mounting parts (2 parts/set)				AIGT383
Connectors	GT01/GT11/GT21C COM. port connectors 5 connectors in a set				AIGT084
	GT30 COM. port connectors 5 connectors in a set				AIGT184

• White LED backlight types are also available for the GT01 and GT11. When ordering, please change the 6th digit of the part number to "1". (Example: AIGT0130B1 and AIGT2130B) (This is a custom order item.)

PLC Compatibility

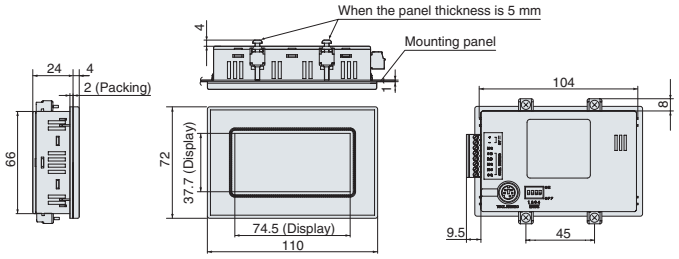
GTWIN Ver. 2.7 (as of December 2005) ●: Compatible –: Not compatible

PLC model \ GT model	GT01		GT11/GT21C		GT30 (Monochrome/Color)
	RS422 type	RS232C type	RS422 type	RS232C type	
Matsushita Electric Works FP Series	●		●		●
Mitsubishi Electric MELSEC-FX0N	●	●*1	●	●*1	●*1
Mitsubishi Electric MELSEC-FX1S	●	●*1	●	●*1	●*1
Mitsubishi Electric MELSEC-FX1N	●	●*1	●	●*1	●*1
Mitsubishi Electric MELSEC-FX1NC	●	●*1	●	●*1	●*1
Mitsubishi Electric MELSEC-FX2N	●	●*1	●	●*1	●*1
Mitsubishi Electric MELSEC-FX2NC	●	●*1	●	●*1	●*1
Mitsubishi Electric MELSEC-FX3UC	●	●*1	●	●*1	●*1
Mitsubishi Electric MELSEC-A (Computer link)	–	●	–	●	●
Omron SYSMAC-C Series	●		●		●
ALLEN-BRADLEY DF1 Protocol	●		●		●
Siemens S7-200 Series	●		●		●
LG MASTER-K (Cnet) Series	●		●		●
Modbus (RTU Mode)	●		●		●
Toshiba Machine PROVISOR TCmini Series	●	–	●	–	–
Yokogawa Electric FA-M3 Series	●		●		●
KEYENCE KV-700, KV-1000	●	–	●	–	–
General-purpose serial interfaces (Purpose-built boards/Other controllers)	● Command response*2		●		●

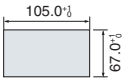
*1: An RS422/RS232C conversion adapter or unit is required.
*2: Notes for using the general-purpose serial communication mode of GT01
GT01 control signals (RS, CS) are not available. Note the following points when you use Duplex 1 or Duplex 2.
• Commands transmitted from a microprocessor board during a GT01 data transmission cannot be accepted.
• When there is no response from GT, retry the command transmission.

Unit: mm

GT01

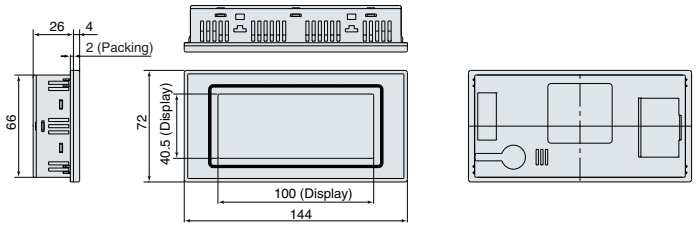


Panel cutout dimensions

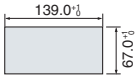


Applicable panel thickness:
1.0 mm to 5.0 mm

GT11

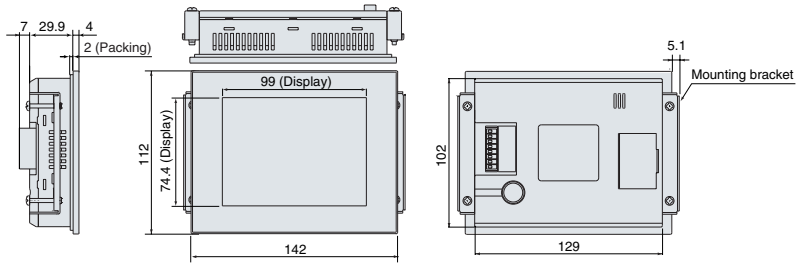


Panel cutout dimensions

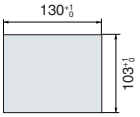


Applicable panel thickness:
1.0 mm to 5.0 mm

GT21C

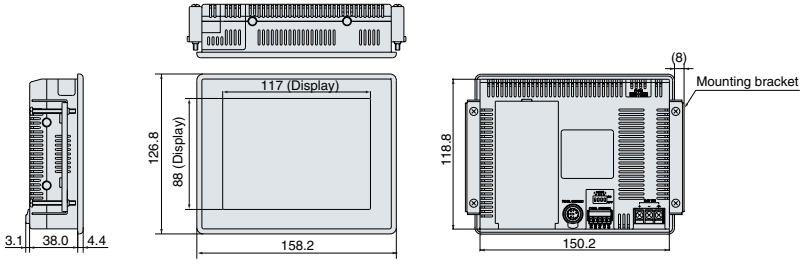


Panel cutout dimensions

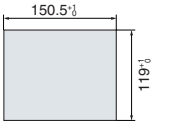


Applicable panel thickness:
1.0 mm to 5.0 mm

GT30



Panel cutout dimensions



Applicable panel thickness:
1.0 mm to 5.0 mm

● All LCD pictures in this catalog are simulated images.

These materials are printed on ECF pulp.
These materials are printed with earth-friendly vegetable-based (soybean oil) ink.

Please contact .....

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ARCT1B267E 200601-1XT

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Printed in Japan.