PFXGP4501TAA

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Standard product information

Family	HMI
Series	GP4000 Series
Size	10"
Model	PFXGP4501TAA
Global Code	PFXGP4501TAA
Product Features	10" AC Analog
Repair Status	✔ (Maintenance service is available, able to be maintained.)

Display specifications

Display type	TFT Color LCD
Display size	10.4"
Resolution	640 x 480 pixels (VGA)
Effective display area	W211.2 x H158.4 mm [W8.31 x H6.24 in.]
Display colors	65,536 colors (No blink) / 16,384 colors (Blink)
Backlight	White LED (Not user replaceable. When replacement is required, contact your local distributor.)
Backlight service life	50,000 hrs. or more (each in continuous operation at 25 °C [77 °F] before backlight brightness decreases to 50%)
Brightness control	16 Levels (Adjusted with touch panel or software)
Touch panel type	Resistive Film (analog)
Touch panel resolution	1,024 x 1,024
Touch panel lifetime	1,000,000 times or more
Language fonts	Japanese: 6,962 (JIS Standards 1 & 2) (including 607 non-kanji characters), ANK: 158 (Korean, Traditional Chinese, Simplified Chinese, Thai and Cyrillic can be added from the font setting of the screen editor.)
Character sizes	Standard font: 8 x 8, 8 x 16, 16 x 16 and 32 x 32 pixel fonts, Stroke font: 6 to 127 pixel fonts, Image font: 8 to 72 pixel fonts
Font sizes	Standard font: Width can be expanded up to 8 times. Height can be expanded up to 8 times.[*1]

8 x 8 dots	80 char. x 60 rows
8 x 16 dots	80 char. x 30 rows
16 x 16 dots	40 char. x 30 rows
32 x 32 dots	20 char. x 15 rows

*1   Other font sizes can be set up with the Editor software.

Electrical specifications

Rated input voltage	100 to 240 Vac
Input voltage limits	85 to 264 Vac
Rated frequency	50 / 60 Hz
Rated frequency range	47 to 63 Hz
Allowable voltage drop	1 cycle or less (Voltage drop interval must be 1 second or more.)
Power consumption	100 Vac: 44 VA or less, 240 Vac: 58 VA or less
In-rush current	30 A or less
Noise immunity	Noise Voltage : 1,500 Vp-p Pulse Duration : 1 µs Rise Time : 1 ns (via noise simulator)
Voltage endurance	1,500 Vac, 20 mA for 1 minute (between power terminal and FG terminals)
Insulation resistance	500 Vdc, 10 MΩ or more (between power terminal and FG terminals)

Environmental specifications

International safety standards	
Surrounding air temperature	0 to 55 °C [32 to 131 °F]
Storage temperature	-20 to +60 °C [-4 to 140 °F]
Ambient humidity	10 to 90 % RH (Wet bulb temperature: 39 °C [102.2 °F] max. - no condensation)
Storage humidity	10 to 90 % RH (Wet bulb temperature: 39 °C [102.2 °F] max. - no condensation)
Dust	0.1 mg/m^3 (10^{-7} oz/ft^3) or less (non-conductive levels)
Pollution degree	For use in Pollution Degree 2 environment
Corrosive gases	Free of corrosive gases
Air pressure (altitude range)	800 to 1,114 hPa (2,000 m [6,561 ft.] above sea level or less)
Vibration resistance	IEC/EN 61131-2 compliant 5 to 9 Hz single amplitude 3.5 mm [0.14 in.] 9 to 150 Hz fixed acceleration: 9.8 m/s^2 X, Y, Z directions for 10 cycles (approx. 100 min.)

Concussion resistance	IEC/EN 61131-2 compliant 147 m/s^2, X, Y, Z directions for 3 times
Electrostatic discharge immunity	Contact Discharge Method: 6 kV (IEC/EN61000-4-2 Level 3)

Memory

Application memory	**When using GP-Pro EX:** - Media: FLASH EPROM - Screen Area: 32MB *Use the screen area when the user font area's capacity is exceeded - for example, when an image font or a picture font is used. - User Font Area: 8MB - Logic Program Area: 132KB (Equivalent to 15,000 steps) *Up to 60,000 steps can be converted in software. However, this reduces application memory capacity (for screen data) by 1 MB. - Free Space: None **Removable System:** No
Backup memory	**When using GP-Pro EX:** - Screen Area: SRAM 320KB - Variable Area: SRAM 64KB **Battery:** Replaceable battery / Primary battery for clock data backup
Clock accuracy	±65 sec./month (deviation at room temperature and power is OFF)[*2]

*2 Depending on the operating temperature and age of unit, the clock can deviate from -380 to +90 sec./month. For systems where this level of deviation is a problem, the user should monitor and make adjustments when required.

Interface specifications

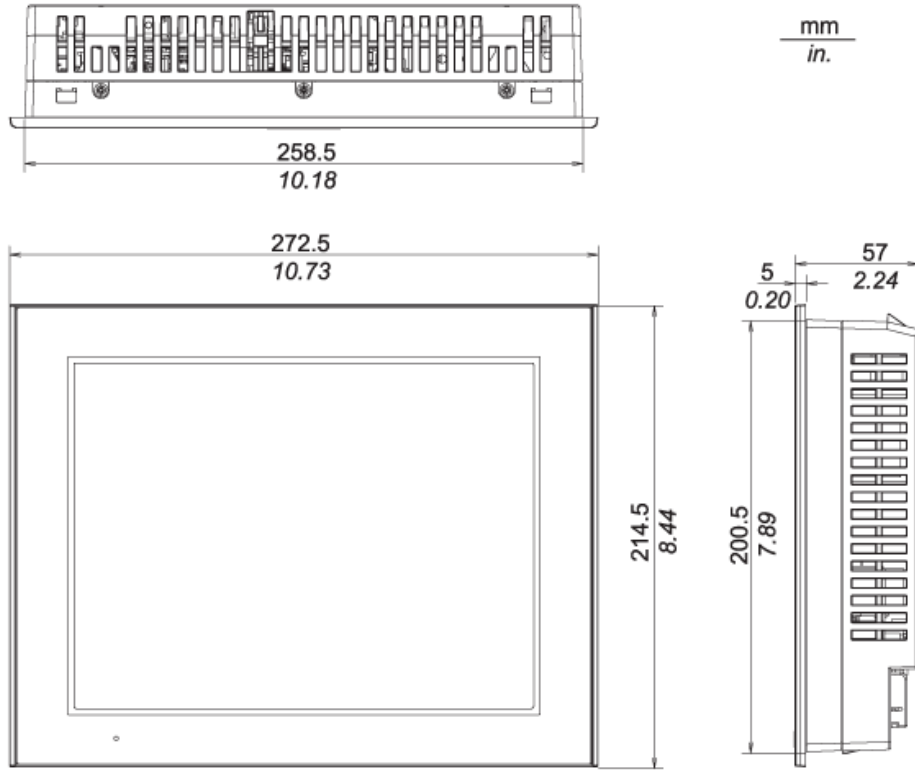|	
Serial (COM1)	Asynchronous Transmission: RS-232C, Data Length: 7 or 8 bits, Stop Bit: 1 or 2 bits, Parity: None, Even or Odd, Data Transmission Speed: 2,400 to 115,200 bps, Connector: D-Sub 9 (plug)
Serial (COM2)	Asynchronous Transmission: RS-422 / 485, Data Length: 7 or 8 bits, Stop Bit: 1 or 2 bits, Parity: None, Even or Odd, Data Transmission Speed: 2,400 to 115,200 bps, 187,500 bps (MPI), Connector: D-Sub 9 pin (plug)
USB (Type A)	Conforms to USB 2.0 (Type A) x 1 Power supply voltage: 5 Vdc ±5 % Output Current: 500 mA or less Communication distance: 5 m [16.4 ft.] or less
USB (mini-B)	Conforms to USB 2.0 (mini-B) x 1, Communication Distance: 5 m [16.4 ft] or less
Ethernet	IEEE802.3i / IEEE802.3u, 10BASE-T / 100BASE-TX, Connector: Modular jack (RJ-45) x 1
SD card	SD Card Slot x 1

Structural specifications

Grounding	Functional grounding: Grounding resistance of 100 Ω, 2mm^2 (AWG 14) or thicker wire, or your country's applicable standard. (Same for FG and SG terminals)
Cooling method	Natural air circulation
Structure	IP65f NEMA #250 TYPE 4X/13 (on the front panel when properly installed in an enclosure)[*3]
External dimensions	W272.5 x H214.5 x D57 mm [W10.73 x H8.45 x D2.25 in.]
Panel cut-out dimensions	W259 x H201 mm [W10.19 x H7.91 in.] Panel thickness area: 1.6 to 5 mm [0.06 to 0.2 in.][*4]
Weight	2 kg [4.41 lb] or less

*3   The front face of this product, installed in a solid panel, has been tested using conditions equivalent to the standards shown in the specification.
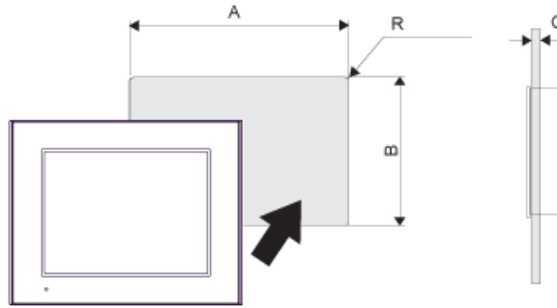
*4   For dimensional tolerance, everything +1/-0 mm [+0.04/-0 in.] and R in angle are below R3 [R0.12 in.]. Even if the installation wall thickness is within the recommended range for the "Panel Cut Dimensions", depending on wall's material, size, and installation location of GP unit and other devices, the installation wall could warp. To prevent warping, the installation surface may need to be strengthened.

Dimensions

External dimensions

Panel cut-out dimensions

	A	B	C	R
GP-4501T GP-4503T	259 mm (+1, -0 mm) (10.2 in. [+0.04, -0 in.])	201 mm (+1, -0 mm) (7.91 in. [+0.04, -0 in.])	1.6...5 mm (0.06...0.2 in.)	3 mm (0.12 in.) maximum
GP-4501TW	301.5 mm (+1, -0 mm) (11.87 in. [+0.04, -0 in.])	227.5 mm (+1, -0 mm) (8.96 in. [+0.04, -0 in.])		

External dimensions with cable

mm
/
in.

38 / 1.50

7 / 0.28

66 / 2.60

4 / 0.16