

#### **GP4000 Series**

## Coated Model No.: PFXGP4501TAAC

- ☑ Standard product information
- ☑ Electrical specifications
- ☑ Memory
- ☑ Structural specifications

- ☑ Display specifications
- ☑ Environmental specifications
- ☑ Interface specifications
- Dimensions

| Standard product information |  |  |  |
|------------------------------|--|--|--|
| Family                       | MI   |  |  |
| Series                       | GP4000 Series  |  |  |
| Size                         | 10"  |  |  |
| Model                        | PFXGP4501TAAC  |  |  |
| Global Code                  | PFXGP4501TAAC  |  |  |
| 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 |

<sup>\*1</sup> 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    | cycle or less (Voltage drop interval must be 1 second or more.)                      |  |  |  |
| Power consumption         | 00 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 M $\Omega$ or more (between power terminal and FG terminals)             |  |  |  |

### Environmental specifications

| Environmental specifications   |  |  |  |  |  |  |
|--------------------------------|--|--|--|--|--|--|
| International safety standards | CE CH USTED LISTED UL/cUL ANSI/ISA 12.12.01  |  |  |  |  |  |
| 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 <sup>3</sup> (10 <sup>-7</sup> oz/ft <sup>3</sup> ) 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 <sup>2</sup> X, Y, Z directions for 10 cycles (approx. 100 min.) |  |  |  |  |  |
|                                |  |  |  |  |  |  |

| Concussion resistance            | IEC/EN 61131-2 compliant 147 m/s <sup>2</sup> , 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   |

<sup>\*2</sup> 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.

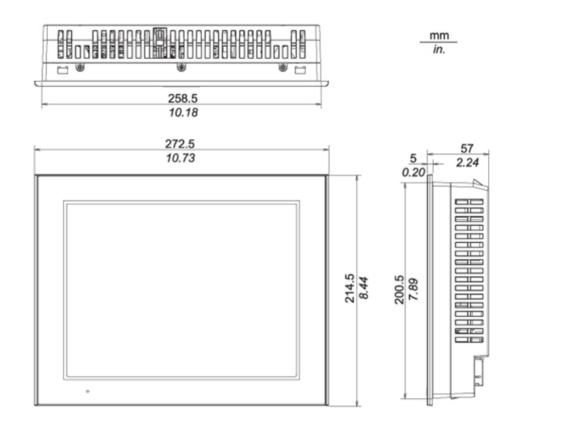
| Interface specifications |  |  |
|--------------------------|--|--|
| Serial (COM1)            | Asynchronous Transmission: RS-232C, Data Length: 7 or 8 bits, Stop Bit: 1 or 2 bits, Parity: None, Even or Odd, Data Transmission Speed: 2,400 to 115,200 bps, Connector: D-Sub 9 (plug)                             |  |
| 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 $\Omega$ , 2mm <sup>2</sup> (AWG 14) or thicker wire, or your country's applicable standard. Same for FG and SG terminals) |  |  |  |
| Cooling method              | ral air circulation  |  |  |  |
| Structure                   | NEMA #250 TYPE 4X/13 (on the front panel when properly installed in an enclosure)*3  |  |  |  |
| External dimensions         | N272.5 x H214.5 x D57 mm [W10.73 x H8.45 x D2.25 in.]  |  |  |  |
| Panel cut-out<br>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   |  |  |  |

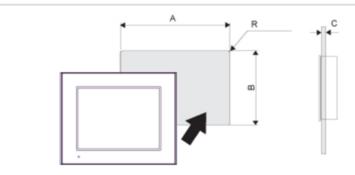
- \*3 The front face of this product, installed in a solid panel, has been tested using conditions equivalent to the standards shown in the specification.
- \*4 For dimensional tolerance, everything +1/-0 mm [+0.04/-0 in.] and R in angle are below R3 [R0.12 in.]. Even if the installation wall thickness 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  | В  | С                        | R                          |
|----------------------|--|--|--------------------------|----------------------------|
| GP-4501T<br>GP-4503T | 259 mm (+1, -0 mm)<br>(10.2 in. [+0.04, -0<br>in.])    | 201 mm (+1, -0 mm)<br>(7.91 in. [+0.04, -0 in.])   | 1.65 mm<br>(0.060.2 in.) | 3 mm (0.12 in.)<br>maximum |
| GP-4501TW            | 301.5 mm (+1, -0 mm)<br>(11.87 in. [+0.04, -0<br>in.]) | 227.5 mm (+1, -0 mm)<br>(8.96 in. [+0.04, -0 in.]) |                          |                            |

# External dimensions with cable

