PFXGP4501TADW

Standard product information
Family
HMI
Series
GP4000 Series
Size
10"
Model
PFXGP4501TADW
Global Code
PFXGP4501TADW
Product Features
10" DC 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
8 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
24 Vdc
Input voltage limits
19.2 to 28.8 Vdc
Allowable voltage drop
10 ms or less
Power consumption
17 W or less
In-rush current
30 A or less
Noise immunity
Noise Voltage : 1,000 Vp-p
Pulse Duration : 1 µs
Rise Time : 1 ns
(via noise simulator)
Voltage endurance
1,000 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 50 °C [32 to 122 °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: 16MB *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 128KB
- Variable Area: None

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
W315 x H241 x D56 mm [W12.4 x H9.49 x D2.20 in.]
Panel cut-out dimensions
W301.5 x H227.5 mm [W11.87 x H8.96 in.]
Panel thickness area: 1.6 to 5 mm [0.06 to 0.2 in.][*4](#)
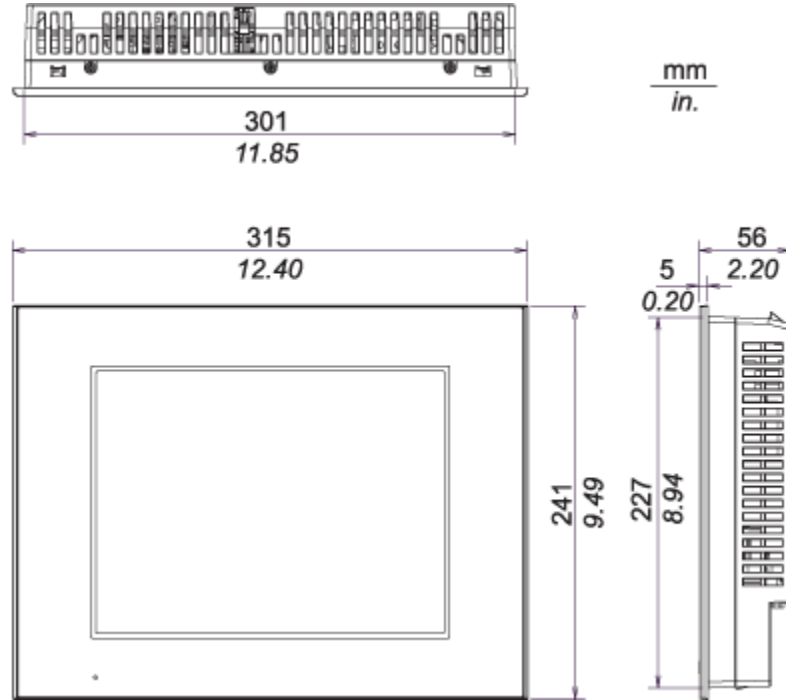Weight
2.5 kg [5.5 lb] or less

[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
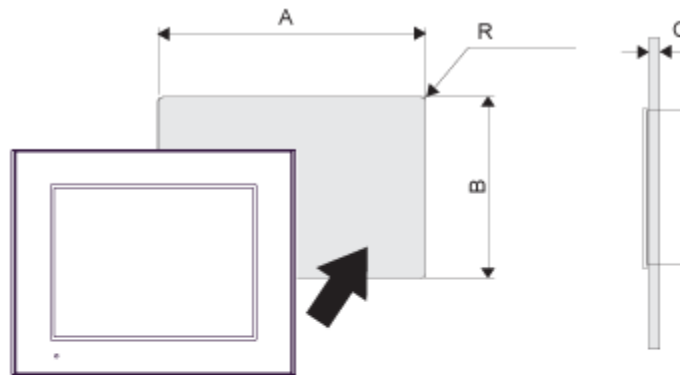
and other devices, the installation wall could warp. To prevent warping, the installation surface may need to be strengthened.

Dimensions
External dimensions

301
11.85

mm
in.

315
12.40

56
2.20

5
0.20

241
9.49

227
8.94

Panel cut-out dimensions

A

R

C

B

	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.

25
0.98

53
2.09

15
0.59