PFXSP5700TPD

- ☑ Standard product information
- ☑ Electrical specifications
- ☑ Interface specifications
- ☑ Dimensions
- ☑ Display specifications
- ☑ Environmental specifications
- ☑ Structural specifications

Standard product information

Family	HMI
Series	SP5000 Series
Size	15"
Model	PFXSP5700TPD
Global Code	PFXSP5700TPD
Product Features	15" DC Auto Scaling Brightness Sensor (Premium Display)
Repair Status	✔ (Maintenance service is available, able to be maintained.)

Display specifications

Display type	TFT Color LCD
Display size	15"
Resolution	1,024 x 768 pixels (XGA)
Auto scaling	Equipped
Effective display area	W304.1 x H228.1 mm [W11.97 x H8.98 in.]
Display colors	16 million colors
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	0 to 100 (Adjusted with touch panel or software)
Brightness sensor	Equipped
Touch panel type	Resistive Film (analog, multi-touch)
Touch panel resolution	1,024 x 1,024

Touch panel lifetime	1,000,000 times or more

Electrical specifications

Rated input voltage	12 to 24 Vdc
Input voltage limits	10.8 to 28.8 Vdc
Allowable voltage drop	12 Vdc: 1.25 ms or less 24 Vdc: 5 ms or less
Power consumption	Max. 22 W When power is not supplied to external devices: 19 W or less Backlight OFF (Stand-by mode): 6 W or less Backlight adjusted (20%): 11 W or less[*1]
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)

*1 Power consumption for Display Module only

Environmental specifications

International safety standards	
Surrounding air temperature	0 to 60 °C [32 to 140 °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 Air Discharge Method: 8 kV (IEC/EN61000-4-2 Level 3)

Interface specifications

USB (Type A)	Conforms to USB 2.0 (Type A) x 1 Power supply voltage: 5 Vdc ±5 % Output Current: 500 mA Communication distance: 5 m [16.4 ft.][*2]
USB (mini-B)	Conforms to USB 2.0 (mini-B) x 1, Communication Distance: 5 m [16.4 ft]

*2   When using the Display Module with the Power Box, you can connect only one of each type of USB device, such as one USB flash drive, one transfer cable, or one barcode reader. If you connect multiple devices that are the same type, only the first device will work.

Structural specifications

Grounding	Functional grounding: Grounding resistance of 100 Ω, 2 mm^2 (AWG 14) or thicker wire, or your country's applicable standard (same for FG and SG terminals).
Cooling method	Natural air circulation
Structure	When using a factory-installed front USB cover: IP65F, IP67F, Type 1 When using a front USB cover as an option: IP66F, IP67F, Type 1, Type 4X (indoor use only)/13 NOTE: The option is a front USB cover with screw manufactured by Pro-face (Model Number PFXZCDCVUS1).[*3]
External dimensions	W397 x H296 x D67 mm [W15.6 x H11.7 x D2.64 in.]
Panel cut-out dimensions	W383.5 x H282.5 mm [W15.10 x H11.12 in.] Panel thickness area: 1.6 to 5 mm [0.06 to 0.2 in.][*4]
Weight	4.5 kg [9.93 lb] or less[*5]

*3   The front face of the unit, installed in a solid panel, has been tested using conditions equivalent to the standards shown in the specification. Even though the unit's level of resistance is equivalent to these standards, oils that should have no effect on the unit can possibly harm the unit. This can occur in areas where either vaporized oils are present, or where low viscosity cutting oils are allowed to adhere to the unit for long periods of time. If the unit's front face protection sheet becomes peeled off, these conditions can lead to the ingress of oil into the unit and separate protection measures are suggested. Also, if non-approved oils are present, it may cause deformation or corrosion of the front panel's plastic cover. Therefore, prior to installing the unit, be sure to confirm the type of conditions that will be present in the unit's operating environment. If the installation gasket is used for a long period of time, or if the unit and its gasket are removed from the panel, the original level of the protection cannot be guaranteed. To maintain the original protection level, be sure to replace the installation gasket regularly.
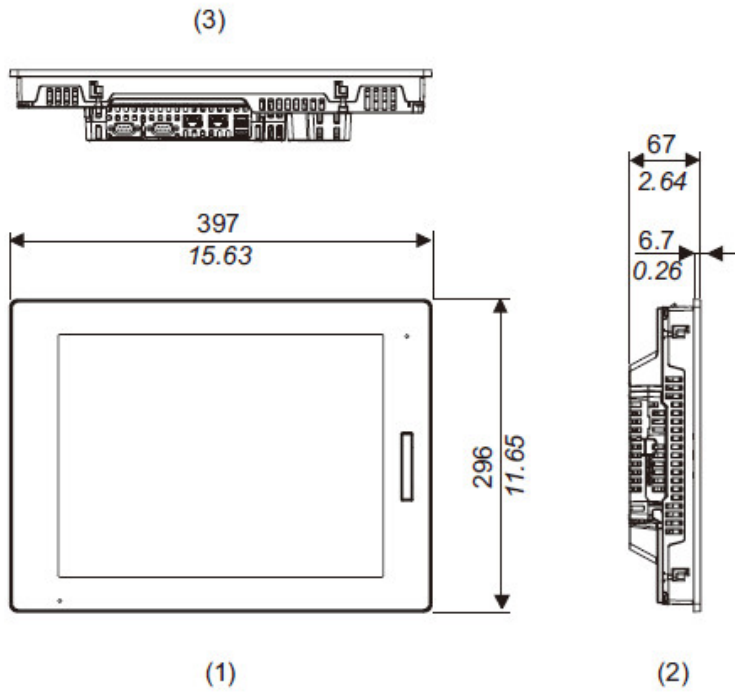
*4   For dimensional tolerance, everything +1/-0 mm [+0.04/-0 in.] and R in angle are below R3 [R0.12 in.]. Even if the installation wall thickness is within the recommended range for the "Panel Cut Dimensions", depending on wall's material, size, and installation location of GP unit and other devices, the installation wall could warp. To prevent warping, the installation surface may need to be strengthened.

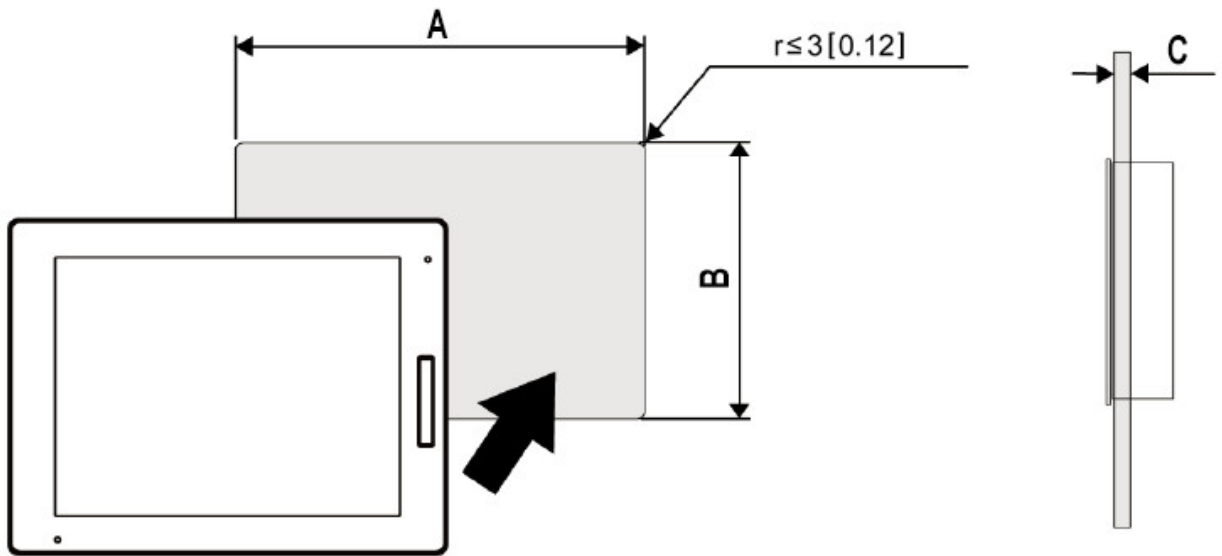*5   Display module only.

Dimensions

External dimensions	Display module and box module combination

mm
―――
in.

(3)

397
15.63

296
11.65

67
2.64

6.7
0.26

(1)

(2)

1 Front
2 Left
3 Bottom

Panel cut-out dimensions

A

r≤3[0.12]

C

B

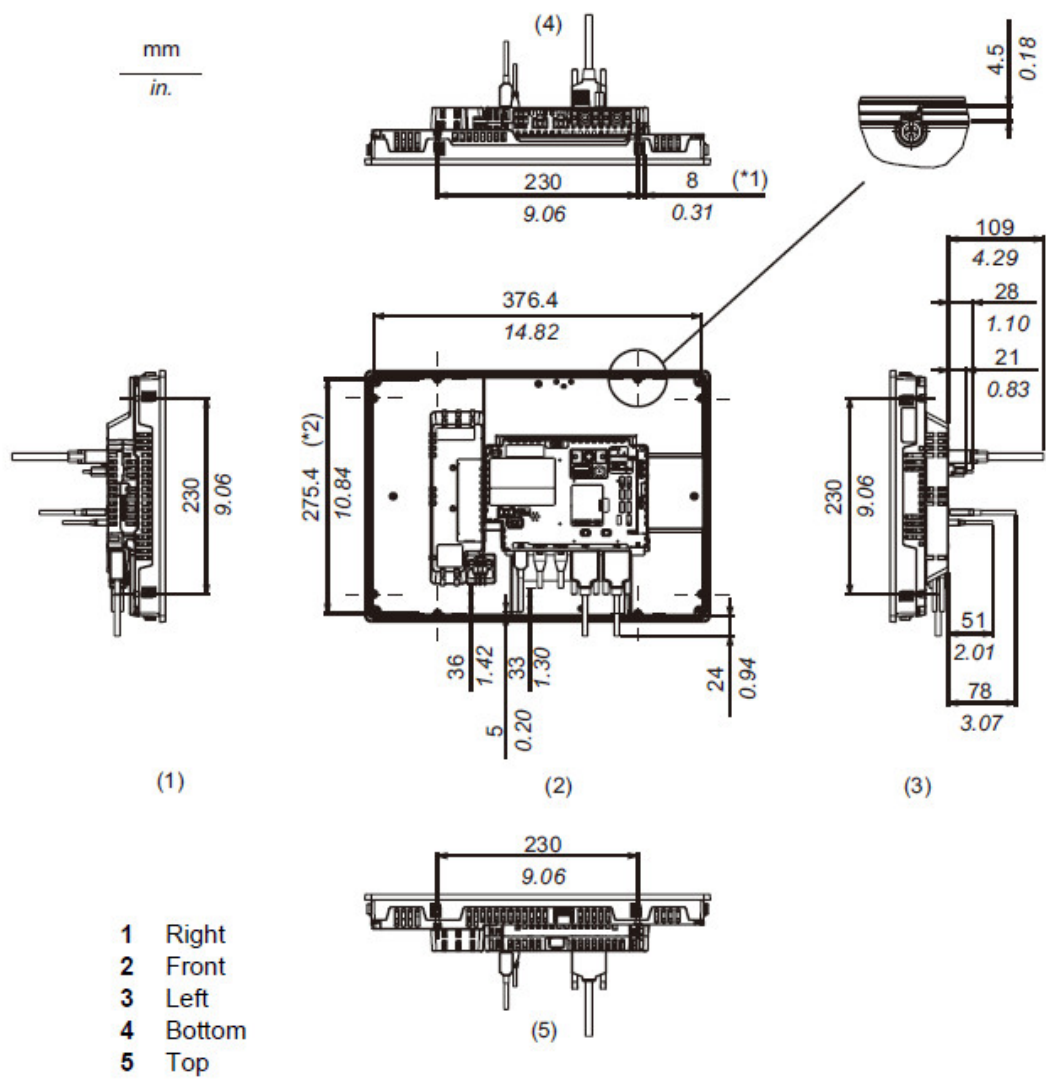| A	B	C
383.5 (+1/-0) mm [15.1 (+0.04/-0)] in.	282.5 (+1/-0) mm [11.12 (+0.04/-0)] in.	1.6 to 5 mm [0.06 to 0.2] in.

External dimensions with cable

mm
___
in.

(4)

4.5
0.18

230
9.06

8 (*1)
0.31

109
4.29

28
1.10

21
0.83

376.4
14.82

230
9.06

275.4 (*2)
10.84

230
9.06

51
2.01

78
3.07

36
1.42

33
1.30

5
0.20

24
0.94

(1)

(2)

(3)

230
9.06

1 Right
2 Front
3 Left
4 Bottom
5 Top

(5)

(Image of Open Box)

*1 Rotation area of the fastener

*2 Pitch of center of installation fastener screws