

# PFXSP5600TPD

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## Standard product information

<b>Family</b>	HMI
<b>Series</b>	SP5000 Series
<b>Size</b>	12"
<b>Model</b>	PFXSP5600TPD
<b>Global Code</b>	PFXSP5600TPD
<b>Product Features</b>	12" DC Auto Scaling Brightness Sensor (Premium Display)
<b>Repair Status</b>	✓ (Maintenance service is available, able to be maintained.)

## Display specifications

<b>Display type</b>	TFT Color LCD
<b>Display size</b>	12.1"
<b>Resolution</b>	1,024 x 768 pixels (XGA)
<b>Auto scaling</b>	Equipped
<b>Effective display area</b>	W245.76 x H184.32 mm [W9.68 x H7.26 in.]
<b>Display colors</b>	16 million colors
<b>Backlight</b>	White LED (Not user replaceable. When replacement is required, contact your local distributor.)
<b>Backlight service life</b>	50,000 hrs. or more (each in continuous operation at 25 °C [77 °F] before backlight brightness decreases to 50%)
<b>Brightness control</b>	0 to 100 (Adjusted with touch panel or software)
<b>Brightness sensor</b>	Equipped
<b>Touch panel type</b>	Resistive Film (analog, multi-touch)
<b>Touch panel resolution</b>	1,024 x 1,024

<b>Touch panel lifetime</b>	1,000,000 times or more
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Electrical specifications	
<b>Rated input voltage</b>	12 to 24 Vdc
<b>Input voltage limits</b>	10.8 to 28.8 Vdc
<b>Allowable voltage drop</b>	12 Vdc: 1.25 ms or less 24 Vdc: 5 ms or less
<b>Power consumption</b>	Max. 21 W When power is not supplied to external devices: 18 W or less Backlight adjusted (20%): 11 W or less Backlight OFF (Stand-by mode): 6 W or less *1
<b>In-rush current</b>	30 A or less
<b>Noise immunity</b>	Noise Voltage : 1,000 Vp-p Pulse Duration : 1 μs Rise Time : 1 ns (via noise simulator)
<b>Voltage endurance</b>	1,000 Vac, 20 mA for 1 minute (between power terminal and FG terminals)
<b>Insulation resistance</b>	500 Vdc, 10 MΩ or more (between power terminal and FG terminals)

\*1 Power consumption for Display Module only

Environmental specifications	
<b>International safety standards</b>	
<b>Surrounding air temperature</b>	0 to 60 °C [32 to 140 °F]
<b>Storage temperature</b>	-20 to +60 °C [-4 to 140 °F]
<b>Ambient humidity</b>	10 to 90 % RH (Wet bulb temperature: 39 °C [102.2 °F] max. - no condensation)
<b>Storage humidity</b>	10 to 90 % RH (Wet bulb temperature: 39 °C [102.2 °F] max. - no condensation)
<b>Dust</b>	0.1 mg/m <sup>3</sup> (10 <sup>-7</sup> oz/ft <sup>3</sup> ) or less (non-conductive levels)
<b>Pollution degree</b>	For use in Pollution Degree 2 environment
<b>Corrosive gases</b>	Free of corrosive gases
<b>Air pressure (altitude range)</b>	800 to 1,114 hPa (2,000 m [6,561 ft.] above sea level or less)

<b>Vibration resistance</b>	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.)
<b>Concussion resistance</b>	IEC/EN 61131-2 compliant 147 m/s <sup>2</sup> , X, Y, Z directions for 3 times
<b>Electrostatic discharge immunity</b>	Contact Discharge Method: 6 kV Air Discharge Method: 8 kV (IEC/EN61000-4-2 Level 3)

## Interface specifications

<b>USB (Type A)</b>	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.]* <sup>2</sup>
<b>USB (mini-B)</b>	Conforms to USB 2.0 (mini-B) x 1, Communication Distance: 5 m [16.4 ft]

\*<sup>2</sup> 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

<b>Grounding</b>	Functional grounding: Grounding resistance of 100 Ω, 2 mm <sup>2</sup> (AWG 14) or thicker wire, or your country's applicable standard (same for FG and SG terminals).
<b>Cooling method</b>	Natural air circulation
<b>Structure</b>	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). <sup>*3</sup>
<b>External dimensions</b>	W315 x H241 x D67 mm [W12.4 x H9.49 x D2.64 in.]
<b>Panel cut-out dimensions</b>	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.]* <sup>4</sup>
<b>Weight</b>	3.2 kg [7.1 lb] or less <sup>*5</sup>

\*<sup>3</sup> 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.

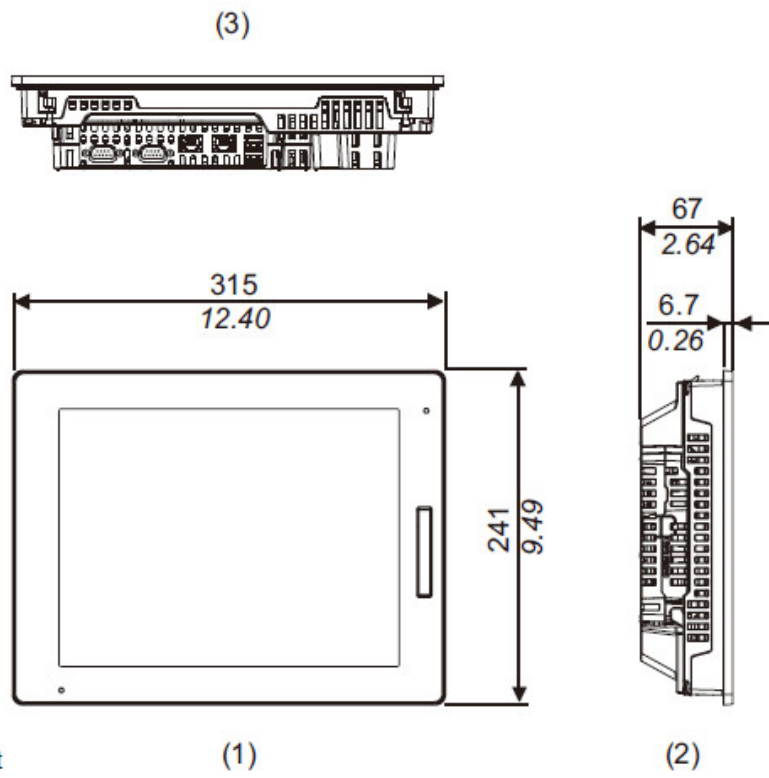
\*<sup>4</sup> For dimensional tolerance, everything +1/-0 mm [+0.04/-0 in.] and R in angle are below R3 [R0.12 in.]. Even if the installation wall thickness is within the recommended range for the "Panel Cut Dimensions", depending on wall's material, size, and installation location of GP unit and other devices, the installation wall could warp. To prevent warping, the installation surface may need to be strengthened.

\*<sup>5</sup> Display module only.

## Dimensions

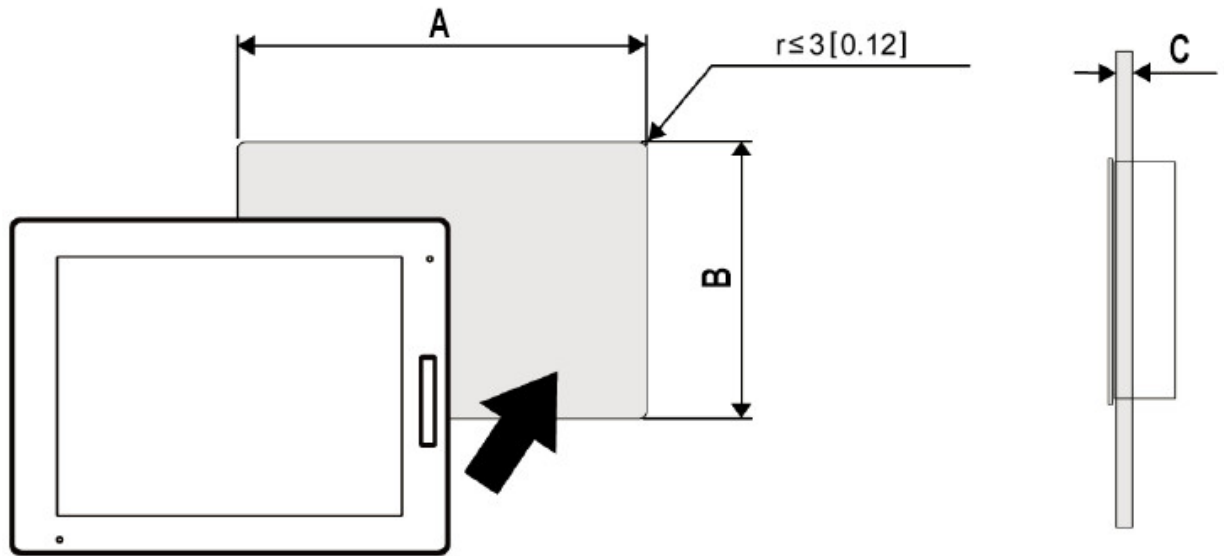
<b>External dimensions</b>	Display module and box module combination
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mm  
in.



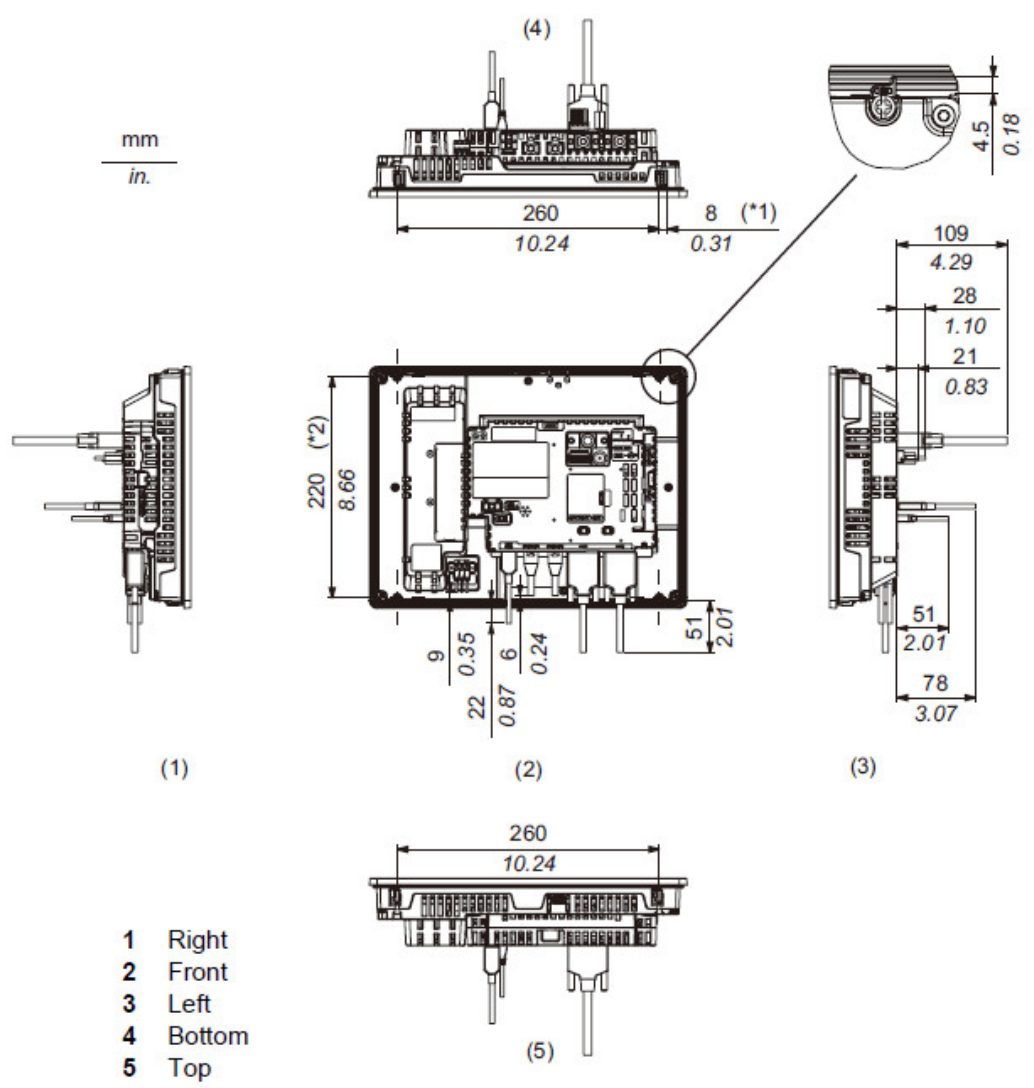
- 1 Front
- 2 Left
- 3 Bottom

Panel cut-out dimensions



A	B	C
301.5 (+1/-0) mm [11.87 (+0.04/-0)] in.	227.5 (+1/-0) mm [8.96 (+0.04/-0)] in.	1.6 to 5 mm [0.06 to 0.2] in.

External dimensions with cable



(Image of Open Box)

\*1 Rotation area of the fastener

\*2 Pitch of center of installation fastener screws