

Display Module

SP5000 SERIES



SP5000 Series is a combined unit of Display Module and Box Module.
The power consumption or weight for the combined unit equals each sum of power consumption or weight of the two modules.

Model Number Configuration

Display Module

PFXSP5 * * * * * D
(1) (2) (3)(4)(5)

(1) Size	(2) Wireless LAN	(3) Resolution	(4) Touch Panel		(5) Power Supply				
7	15"	60	Yes	T	TFT	P	Premium (Multi)	D	DC
6	12"	00	-	W	Wide TFT	A	Advanced		
5	10"								
4	7"								

· Coated and/or color selectable display modules are also available. In addition to Silver, there are three optional colors, Black Beige Off-white

×

Box Module

PFXSP5 B * *
(6) (7)

(6) Type		(7) Class	
B	Box	40	Open
		10	Power

· Coated models are also available.

Display Specifications

	Premium Display				Advanced Display		
	SP-5700TP	SP-5660TP	SP-5600TP	SP-5500TP	SP-5600WA	SP-5500WA	SP-5400WA
Display Type	TFT color LCD						
Display Size	15"	12"		10"	12" wide	10" wide	7" wide
Resolution	1,024 x 768 pixels (XGA)			800 x 600 pixels (SVGA)	1,280 x 800 pixels (WXGA)		800 x 480 pixels (WVGA)
Auto Scaling	Yes						
Effective Display Area	W304.1 x H228.1mm (W11.97 x H8.98 in.)	W245.8 x H184.3mm (W9.68 x H7.26 in.)		W211.2 x H158.4mm (W8.31 x H6.24 in.)	W261.1 x H163.2mm (W10.28 x H6.43 in.)	W217.0 x H135.6mm (W8.54 x H5.34 in.)	W154.1 x H95.9mm (W6.06 x H3.78 in.)
Display Colors	16million colors				262,144 colors		
Backlight	White LED (Not user replaceable. When replacement is required, contact your local Pro-face distributor.)						
Backlight Service Life	50,000 hours or more (continuous operation at 25 ° C [77 ° F] before backlight brightness decreases to 50%)						
Brightness Control	0...100 (Adjusted with touch panel or software)						
Brightness Sensor	Yes				-		
Front USB Interface	Yes				-		
Touch Panel Type	Resistive Film (analog, multi-touch)				Resistive Film (analog)		
Touch Panel Resolution	1,024 x 1,024						
Touch Panel Service Life	1 million times or more						

Electrical Specifications

	Premium Display				Advanced Display			
	SP-5700TP	SP-5660TP	SP-5600TP	SP-5500TP	SP-5600WA	SP-5500WA	SP-5400WA	
Rated Input Voltage	12...24 Vdc							
Input Voltage Limits	10.8...28.8 Vdc							
Voltage Drop	12Vdc: 1.25ms or less 24Vdc: 5ms or less							
*1 Power Consumption	Max	22W	23W	21W	15W	11.5W	8.5W	6.5W
	When power is not supplied to devices via front USB	19W or less	20W or less	18W or less	12W or less	-		
	When screen turns off the backlight (Standby Mode)	6W or less	8W or less	6W or less	6W or less	2.5W or less		2W or less
	When screen backlight 20%	11W or less	13W or less	11W or less	8W or less	6W or less	5W or less	4W or less
In-Rush Current	30A or less							
Voltage Endurance	1,000 Vac, 20 mA for 1 minute (between charging and FG terminals)							
Insulation Resistance	500 Vdc, 10 MΩ or more (between charging and FG terminals)							

*1 Power Consumption for Display Module only.

Display Module

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Environmental Specification

	Premium Display				Advanced Display		
	SP-5700TP	SP-5660TP	SP-5600TP	SP-5500TP	SP-5600WA	SP-5500WA	SP-5400WA
Surrounding Air Temperature	0...60 ° C (32...140 ° F)						
Storage Temperature	-20...60 ° C (-4...140 ° F)						
Surrounding Air and Storage Humidity	10%...90% RH (Non condensing, wet bulb temperature 39 ° C [102.2 ° F] or less)						
Dust	0.1 mg/m3 (10-7 oz/ft3) or less (non-conductive levels)						
Pollution Degree	For use in Pollution Degree 2 environment						
Corrosive Gases	Free of corrosive gases						
Atmospheric Pressure (Operating Altitude)	800...1,114 hPa (2,000 m [6,561 ft] or lower)						
Vibration Resistance	IEC/EN 61131-2 compliant 5...9 Hz Single amplitude 3.5 mm (0.14 in.) 9...150 Hz Fixed acceleration: 9.8 m/s2 X, Y, Z directions for 10 cycles (approx. 100 min.)						
Shock Resistance	IEC/EN 61131-2 compliant 147 m/s2, X, Y, Z directions for 3 times						
Noise Immunity	Noise Voltage: 1,000 Vp-p Pulse Duration: 1 μs Rise Time: 1 ns(via noise simulator)						
Electrostatic Discharge Immunity	Contact Discharge Method: 6 kV (IEC/EN 61000-4-2 Level 3)						

Interface Specification

	Premium Display				Advanced Display		
	SP-5700TP	SP-5660TP	SP-5600TP	SP-5500TP	SP-5600WA	SP-5500WA	SP-5400WA
Wireless LAN	-	Yes	-	-	-		
USB (Type A) *2	Connector: USB 2.0 (Type A) x 1, Power Supply Voltage: 5Vdc ±5%, Maximum Current Supplied: 500mA, Maximum Transmission Distance: 5m (16.4 ft)				-		
USB (mini B)	Connector: USB 2.0 (mini B) x 1, Maximum Transmission Distance: 5m (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 bar code reader. If you connect multiple devices that are the same type, only the first device will work.

Wireless LAN (Only for SP-5660TP) *3 *4

Standards	IEEE802.11b/IEEE802.11g/IEEE802.11n	
Frequency bandwidth	2.4 GHz	
Channel bandwidth	20 MHz	
Channel	Access Point mode*5: 1...11 ch Client mode*6: North America US: 1...11 ch Japan JP: 1...13 ch Europe EU: 1...13 ch Korea KR: 1...13 ch China CN: 1...13 ch Taiwan TW: 1...11 ch	
Transmission speed	IEEE802.11b: max 11 Mbps IEEE802.11g: max 54 Mbps IEEE802.11n: max 72.2 Mbps	
Action mode	Client mode/Access Point mode	
Communication mode	Infrastructure	
Network authentication	Open, WPA-Personal, WPA2-Personal	
Data encryption	WEP (128 bit) (Open)*7 AUTO/TKIP (WPA-Personal) AES (WPA2-Personal)	
Maximum client connections	10	
Connection angle and distance	Only the display side is connectable. The enabled connectivity angle and distance depend on your operating environment, applications to be used, and a communication target device. Be sure to conduct operation check including directionality in your operating environment before use.	

*3 For the Wireless LAN, please use in a combination with the Open Box module.

*4 Do not use wireless communication to control machinery. Wireless communication system design must take into account the possibility of communication interference.

*5 In Access Point mode, IEEE802.11d is not supported.

*6 If the surrounding access points do not support IEEE802.11d, channels are limited from 1 to 11ch.

*7 In Access Point mode, WEP is not supported.

Structural Specification

	Premium Display			Advanced Display		
	SP-5700TP	SP-5660TP	SP-5600TP	SP-5500TP	SP-5600WA	SP-5500WA
Grounding	Functional grounding: Grounding resistance of 100 Ω, 2 mm2 (AWG 14) or thicker wire, or your country's applicable standard (same for FG and SG terminals).					
Cooling Method	Natural air circulation					
Structure *8	When using a factory-installed front USB cover: IP65F, IP67F. When using a front USB cover option (PFXZCDCVUS1): IP66F, IP67F, Type 4X (Indoor Use Only)/13 * The front face of this product when properly installed in an enclosure and not using the front panel USB port.			IP66F, IP67F, TYPE 4X (Indoor Use Only)/13 * on the front panel when properly installed in an enclosure.		
External Dimensions	W397 x H296 x D67 mm (W15.6 x H11.7 x D2.64 in.)	W315 x H241 x D67 mm (W12.4 x H9.49 x D2.64 in.)	W272.5 x H214.5 x D67 mm (W10.73 x H8.44 x D2.64 in.)	W308.5 x H230.5 x D67 mm (W12.15 x H9.07 x D2.64 in.)	W268.5 x H198.5 x D67 mm (W10.57 x H7.81 x D2.64 in.)	W203.6 x H148.6 x D36 mm (W8.02 x H5.85 x D1.42 in.)*9
Panel Cut Dimensions *10	W383.5 x H282.5mm	W301.5 x H227.5mm	W259 x H201mm	W295 x H217mm	W255 x H185mm	W190 x H135mm
Weight *11	4.5kg以下	3.2kg以下	2.7kg以下	3kg以下	2.5kg以下	1.2kg以下

*8 The front face of this product, installed in a solid panel, has been tested using conditions equivalent to the standards shown in the specification.

*9 When combined with Box Module, the depth is 67mm (2.64 in.).

*10 For dimensional tolerance, everything +1/-0 mm (+0.04/-0 in.) and R in angle are below R3 (R0.12 in.)

*11 Weight for Display Module only

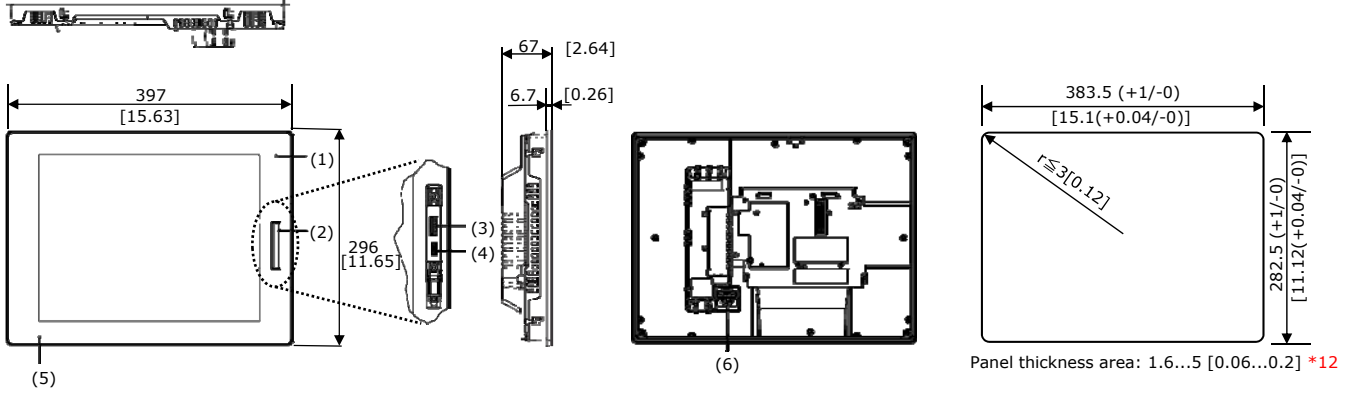
Display Module - Premium Display

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External Dimensions/Parts Identification/Panel Cut Dimensions

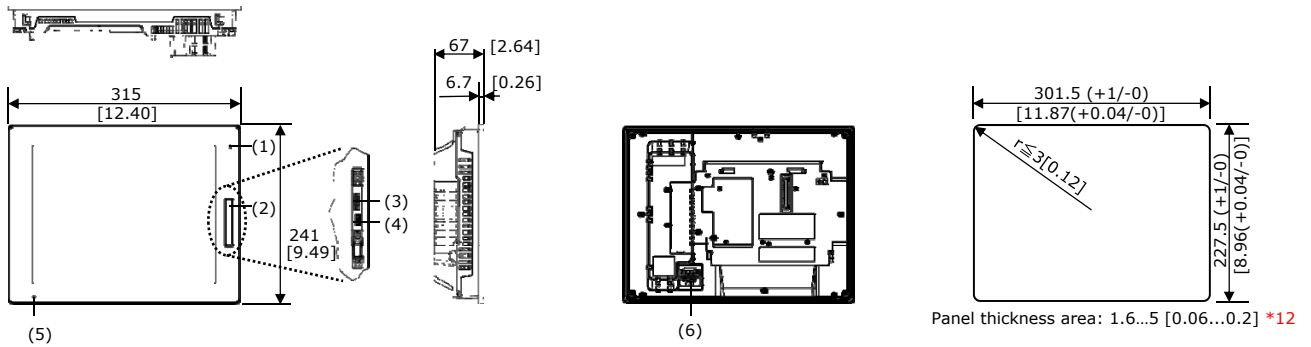
SP-5700TP

mm [in.]



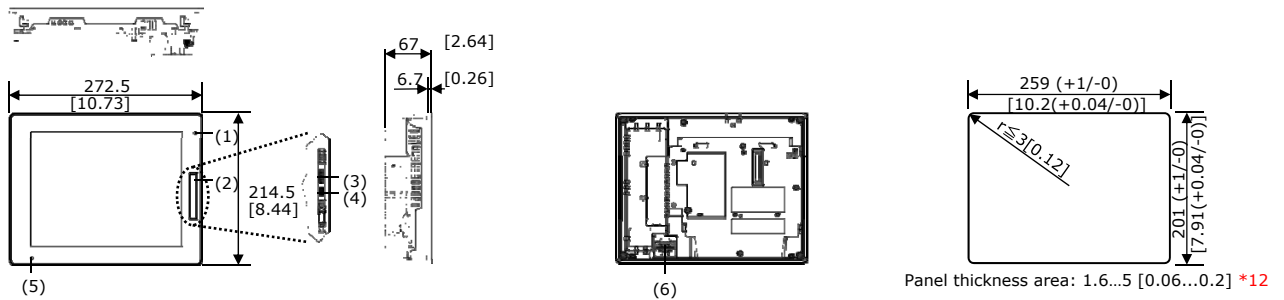
(1) Brightness Sensor (2) Front USB Cover (3) USB (Type A) Interface (4) USB (mini-B) Interface (5) Status LED (6) Power Supply Connector

SP-5660TP / SP-5600TP



(1) Brightness Sensor (2) Front USB Cover (3) USB (Type A) Interface (4) USB (mini-B) Interface (5) Status LED (6) Power Supply Connector

SP-5500TP



(1) Brightness Sensor (2) Front USB Cover (3) USB (Type A) Interface (4) USB (mini-B) Interface (5) Status LED (6) Power Supply Connector

*12 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 this product and other devices, the installation wall could warp. To prevent warping, the installation surface may need to be strengthened.

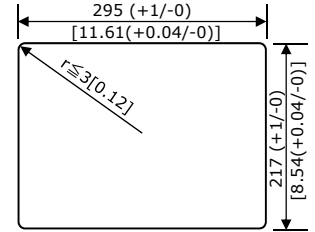
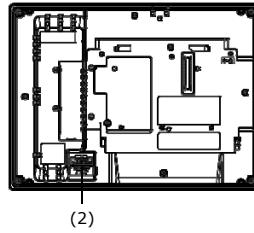
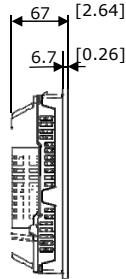
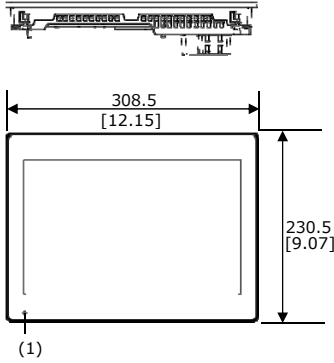
Display Module - Advanced Display

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External Dimensions/Parts Identification/Panel Cut Dimensions

SP-5600WA

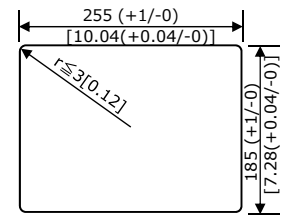
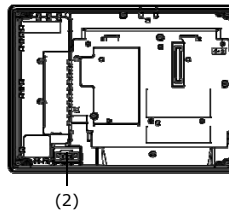
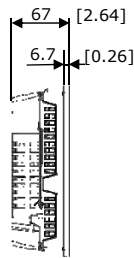
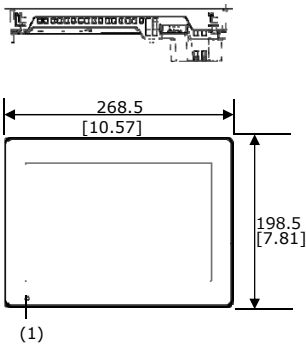
mm [in.]



Panel thickness area: 1.6...5 [0.06...0.2] *13

(1) Status LED (2) Power Supply Connector

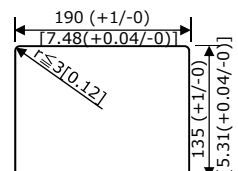
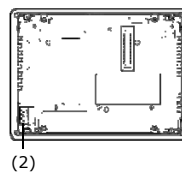
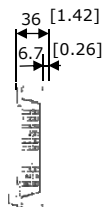
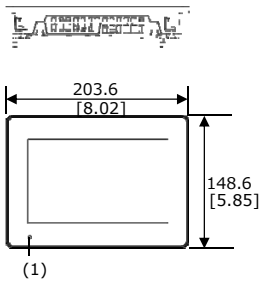
SP-5500WA



Panel thickness area: 1.6...5 [0.06...0.2] *13

(1) Status LED (2) Power Supply Connector

SP-5400WA



Panel thickness area: 1.6...5 [0.06...0.2] *13

(1) Status LED (2) Power Supply Connector

*13 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 this product and other devices, the installation wall could warp. To prevent warping, the installation surface may need to be strengthened.