

Replacement Book

SP5000 Open Box to PSA6000 Atom

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Preface

This guidebook introduces points to be noted to replace following models of SP5000 Open BOX with PSA6000 series. This is a replacement guidebook, and it does not guarantee compatibility.

Currently used device		Replacement model
SP-5600TP/ SP-5660TP/SP-5600TA + SP-5B41 (Open Box) PFXSP5660TPD/PFXSP5600TPD/ PFXSP5600TAD + PFXSP5B41 or PFXSP5B411 or PFXSP5B412	⇒	PSA6000 12" W (Atom) Model : PFXPSA6AED18W11
SP-5600WA + SP-5B41 (Open Box) PFXSP5600WAD + PFXSP5B41 or PFXSP5B411 or PFXSP5B412	⇒	PSA6000 12" W (Atom) Model : PFXPSA6AED18W11
SP-5700TP + SP-5B41 (Open Box) PFXSP5700TPD + PFXSP5B41 or PFXSP5B411 or PFXSP5B412	⇒	PSA6000 15" (Atom) Model : PFXPSA6A7D18W11
SP-5700WCD + SP-5B41 (Open Box) PFXSP5700WCD+ PFXSP5B41 or PFXSP5B411 or PFXSP5B412	⇒	PSA6000 15" W (Atom) Model : PFXPSA6AFD18W11

For SP5000 Open Box, also refer to recommended replacement to PS6000 Basic Box.

Safety Information:

To properly use the products described in this book, please follow the directions below.

- Be sure to read the User Guide and the other provided documents before use.
- The application of this product requires expertise in the design and programming of control systems. Only persons with such expertise should be allowed to program, install, alter, and apply this product.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

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Chapter 1 Specifications Comparison

1.1 SP-5600TP/ SP-5660TP/SP-5600TA + SP-5B41 and PSA6000 12" W (Atom)

1.1.1 Display Specifications: SP-5600TP/ SP-5660TP/SP-5600TA + SP-5B41 and PSA6000 12" W (Atom)

Display Specifications			
	SP-5600TP/ SP-5660TP + SP-5B41	SP-5600TA + SP-5B41	PSA6000 12" W (Atom)
			
			
<p style="color: red;">*SP-5600TA is without Front USB</p>			
Display Type		TFT Color LCD (12")	
Display Resolution		XGA 1024 x 768	UP! WXGA 1280 x 800
Display Colors		262,144 colors	UP! Approx.16 million colors
Backlight		White LED (not user replaceable. When replacement is required, contact customer support.)	
Brightness control		101 levels (adjusted with touch panel or software)	
Backlight service life		50,000 hours or more (continuous operation at 25 °C [77 °F]- ambient temperature- before backlight brightness decreases to 50%)	30,000 hours or more (continuous operation at 25 °C [77 °F]-ambient temperature- before backlight brightness decreases to 50%)
Brightness Sensor		Yes	None
Touch panel	Type	Resistive Film (analog, multi touch)	Resistive Film (analog, single touch)
	Mode	None	
		UP! Projected capacitive touch panel (multitouch, simultaneous touch number-2)	
		None	

1.1.2 Performance Specifications: SP-5600TP/ SP-5660TP/SP-5600TA + SP-5B41 and PSA6000 12" W (Atom)

Performance Specifications			
		SP-5600TP/ SP-5660TP/ SP-5600TA + SP-5B41	PSA6000 12" W (Atom)
CPU		Atom E3825	UP! Atom X7425E
	Base frequency	1.33 GHz	UP! 1.50 GHz
	Max turbo boost frequency	-	UP! 3.40 GHz * *Default: enabled
	L2 cache	1 MB	UP! 6 MB
	Core number	2	UP! 4
	Thread number	2	UP! 4
Main memory		SP-5B41: DDR3L 1066 MHz - SDRAM 2 GB SP-5B411/412: DDR3L SDRAM 4 GB	UP! 260-pin DDR5 SO-DIMM socket x 1 (up to 16 GB/socket) UP! Support In-band ECC
Graphics accelerator		Intel® HD Graphics for Intel Atom® Processor Z3700 Series	UP! Intel® UHD Graphics
Security chip		-	UP! TPM 2.0
BIOS		Legacy BIOS	UP! UEFI BIOS
Operating system		SP-5B41: Open Box (Windows® Embedded Standard 7 Service Pack 1) SP-5B411/412: Windows® 10 IoT Enterprise 2019 LTSC (32 bit)	UP! Windows® 11 IoT Enterprise 2024 LTSC (64 bit)*1
Buzzer		Yes	Yes

*1 OS is different between SP5000 and PSA6000. Some software might have no compatibility.

SP-5B411/412: Windows® 10 IoT Enterprise 2019 LTSC (32 bit)

PSA6000: Windows® 11 IoT Enterprise 2024 LTSC (64 bit)

1.1.3 General Specifications: SP-5600TP/ SP-5660TP/SP-5600TA + SP-5B41 and PSA6000 12" W (Atom)

General Specifications				
		SP-5600TP/ SP-5660TP + SP-5B41	SP-5600TA + SP-5B41	PSA6000 12" W (Atom)
Panel cut dimensions		W301.5 mm x H227.5 mm		W295 mm x H217 mm (No panel cut adapter available)
Panel thickness		1.6 mm to 5 mm		
External dimensions (including bezel)		W315.0 x H241.0 x D67 mm		W307.4 x H229.4 x D58.8 mm
Front bezel material		Aluminum		
Weight		3.2 kg or less		3.4 kg or less
Cooling method		Natural air circulation (fanless)		
Power supply		DC power supply : 24V		DC power supply: 24V
Power consumption	DC	SP-5600TP When backlight is off: 23 W or less Max: 56 W SP-5660TP When backlight is off: 25 W or less Max: 58 W	When backlight is off: 17.5 W or less Max: 44.5 W	When backlight is off: 30 W No power supplied to outside: 40 W Max: 50 W
Ambient air temperature		0...60 °C (32...140 °F)		0...50 °C (32...122 °F) (with an airflow velocity of 0.6 m/s) 0...40 °C (32...104 °F) (with no airflow)

1.1.4 Interface Specifications: SP-5600TP/ SP-5660TP/SP-5600TA + SP-5B41 and PSA6000 12" W (Atom)

Interface Specifications			
	SP-5600TP/ SP-5660TP + SP-5B41	SP-5600TA + SP-5B41	PSA6000 12" W (Atom)
Serial (D-Sub 9-pin plug)	COM1: RS-232C/422/485 (non-isolated) COM2: RS-232C/422/485 (non-isolated) (default: RS-485, enable by launcher)	COM1: RS-232C (non-isolated) COM2: RS-422/485 (non-isolated) (default: RS-485, enable by BIOS) *1 *Not support VCC(DC5V) output function of RS232C COM port	
Disk	CFast Card 32 GB x 1 SDXC Card x1		UP! M.2 SSD 128GB as default, up to 512GB x2 supported
USB	USB Type-A x3 (2.0) USB Type-mini-B x1 (2.0) * *for transporting project file	USB Type-A x2 (2.0)	UP! USB Type-A x2 (2.0) UP! USB Type-A x2 (3.1 Gen1) *Project transfer to be done via Ethernet USB Clamp is sold separately
Ethernet	IEEE802.3, 10BASE-T/100BASE-TX/1000BASE-T x2		UP! IEEE1588, 10 BASE-T/ 100 BASE-TX/1000BASE-T, Wake on LAN (WOL) supported x3 * When status is S4 (hybrid shutdown), Wake on LAN cannot be used.
Sound	Line input/Line output/Microphone input		Line output/Microphone input (Option: PFXP6CVUSAU)
Video output	DVI-D Output Interface x 1		UP! Display port x1 (Dual mode supported)
Option Interface Slot	-		-
Wireless LAN	SP-5600TP/ SP-5600TA: None SP-5660TP: IEEE802.11b/11g/11n		-*2

*1 Refer to PSA6000 Series User Guide Serial Interface>RS-422/485 Port Setting.

*2 Refer to PSA6000 Series User Guide Installing M.2-E Card.

1.2 SP-5600WA + SP-5B41 and PSA6000 12" W (Atom)

1.2.1 Display Specifications: SP-5600WA + SP-5B41 and PSA6000 12" W (Atom)

Display Specifications		
	SP-5600WA + SP-5B41	PSA6000 12" W (Atom)
		
Display Type	TFT Color LCD (12" Wide)	
Display Resolution	WXGA 1280 x 800	
Display Colors	262,144 colors	UP! Approx.16 million colors
Backlight	White LED (not user replaceable. When replacement is required, contact customer support.)	
Brightness control	101 levels (adjusted with touch panel or software)	
Backlight service life	50,000 hours or more (continuous operation at 25 °C [77 °F]-ambient temperature- before backlight brightness decreases to 50%)	30,000 hours or more (continuous operation at 25 °C [77 °F]-ambient temperature- before backlight brightness decreases to 50%)
Touch panel	Type	Resistive Film (analog, single touch)
	Mode	None
	UP! Projected capacitive touch panel (multitouch, simultaneous touch number-2)	
	None	

1.2.2 Performance Specifications: SP-5600WA + SP-5B41 and PSA6000 12" W (Atom)

Performance Specifications			
		SP-5600WA + SP-5B41	PSA6000 12" W (Atom)
CPU		Atom E3825	UP! Atom X7425E
	Base frequency	1.33 GHz	UP! 1.50 GHz
	Max turbo boost frequency	-	UP! 3.40 GHz * *Default: enabled
	L2 cache	1 MB	UP! 6 MB
	Core number	2	UP! 4
	Thread number	2	UP! 4
Main memory		SP-5B41: DDR3L 1066 MHz - SDRAM 2 GB SP-5B411/412: DDR3L SDRAM 4 GB	UP! 260-pin DDR5 SO-DIMM socket x 1 (up to 16 GB/socket) UP! Support In-band ECC
Graphics accelerator		Intel® HD Graphics for Intel Atom® Processor Z3700 Series	UP! Intel® UHD Graphics
Security chip		-	UP! TPM 2.0
BIOS		Legacy BIOS	UP! UEFI BIOS
Operating system		SP-5B41: Open Box (Windows® Embedded Standard 7 Service Pack 1) SP-5B411/412: Windows® 10 IoT Enterprise 2019 LTSC 32 bit	UP! Windows® 11 IoT Enterprise 2024 LTSC (64 bit)*1
Buzzer		Yes	Yes

*1 OS is different between SP5000 and PSA6000. Some software might have no compatibility.

SP-5B411/412: Windows® 10 IoT Enterprise 2019 LTSC (32 bit)

PSA6000: Windows® 11 IoT Enterprise 2024 LTSC (64 bit)

1.2.3 General Specifications: SP-5600WA + SP-5B41 and PSA6000 12" W (Atom)

General Specifications		
	SP-5600WA + SP-5B41	PSA6000 12" W (Atom)
Panel cut dimensions	W295.0 mm x H217.0 mm	
Panel thickness	1.6 mm to 5 mm	
External dimensions (including bezel)	W308.5 x H230.5 x D67 mm	W307.4 x H229.4 x D58.8 mm
Front bezel material	Aluminum	
Weight	3.9 kg or less	3.4 kg or less
Cooling method	Natural air circulation (fanless)	
Power supply	DC power supply : 24V	DC power supply: 24V
Power consumption	DC	When backlight is off: 27.5 W or less Max: 45 W When backlight is off: 30 W No power supplied to outside: 40 W Max: 50 W
Ambient air temperature	0...60 °C (32...140 °F) 0...50 °C (32...122 °F) (with an airflow velocity of 0.6 m/s) 0...40 °C (32...104 °F) (with no airflow)	

1.2.4 Interface Specifications: SP-5600WA + SP-5B41 and PSA6000 12" W (Atom)

Interface Specifications		
	SP-5600WA + SP-5B41	PSA6000 12" W (Atom)
Serial (D-Sub 9-pin plug)	COM1: RS-232C/422/485 (non-isolated) COM2: RS-232C/422/485 (non-isolated) (default: RS-485, enable by launcher)	COM1: RS-232C (non-isolated) COM2: RS-422/485 (non-isolated) (default: RS-485, enable by BIOS)*1 *not support VCC(DC5V) output function of RS232C COM port
Disk	CFast Card 32 GB x 1 SDXC Card x1	UP! M.2 SSD 128GB as default, up to 512GB x2 supported
USB	USB Type-A x3 (2.0) USB Type-mini-B x1 (2.0) * *for transporting project file	UP! USB Type-A x2 (2.0) UP! USB Type-A x2 (3.1 Gen1) *Project transfer to be done via Ethernet USB Clamp is sold separately
Ethernet	IEEE802.3, 10BASE-T/100BASE-TX/1000BASE-T x2	UP! IEEE1588, 10 BASE-T/ 100 BASE-TX/1000BASE-T, Wake on LAN (WOL) supported x3 * When status is S4 (hybrid shutdown), Wake on LAN cannot be used.
Sound	Line input/Line output/Microphone input	Line output/Microphone input (Option: PFXYP6CVUSAU)
Video output	DVI-D Output Interface x 1	UP! Display port x1 (Dual mode supported)
Option Interface Slot	-	-

*1 Refer to PSA6000 Series User Guide Serial Interface>RS-422/485 Port Setting.

1.3 SP-5700TP + SP-5B41 and PSA6000 15" (Atom)

1.3.1 Display Specifications: SP-5700TP + SP-5B41 and PSA6000 15" (Atom)

Display Specifications		
	SP-5700TP + SP-5B41	PSA6000 15" (Atom)
		
Display Type	TFT Color LCD (15")	
Display Resolution	XGA 1024 x 768	
Display Colors	262,144 colors	UP! Approx.16 million colors
Backlight	White LED (not user replaceable. When replacement is required, contact customer support.)	
Brightness control	101 levels (adjusted with touch panel or software)	
Backlight service life	50,000 hours or more (continuous operation at 25 °C [77 °F]-ambient temperature- before backlight brightness decreases to 50%)	70,000 hours or more (continuous operation at 25 °C [77 °F]-ambient temperature- before backlight brightness decreases to 50%)
Brightness Sensor	Yes	None
Touch panel	Type	Resistive Film (analog, multitouch) UP! Projected capacitive touch panel (multitouch, simultaneous touch number-2)
	Mode	None

1.3.2 Performance Specifications: SP-5700TP + SP-5B41 and PSA6000 15" (Atom)

Performance Specifications			
		SP-5700TP + SP-5B41	PSA6000 15" (Atom)
CPU		Atom E3825	UP! Atom X7425E
	Base frequency	1.33 GHz	UP! 1.50 GHz
	Max turbo boost frequency	-	UP! 3.40 GHz * *Default: enabled
	L2 cache	1 MB	UP! 6 MB
	Core number	2	UP! 4
	Thread number	2	UP! 4
Main memory		SP-5B41: DDR3L 1066 MHz - SDRAM 2 GB SP-5B411/412: DDR3L SDRAM 4 GB	UP! 260-pin DDR5 SO-DIMM socket x 1 (up to 16 GB/socket) UP! Support In-band ECC
Graphics accelerator		Intel® HD Graphics for Intel Atom® Processor Z3700 Series	UP! Intel® UHD Graphics
Security chip		-	UP! TPM 2.0
BIOS		Legacy BIOS	UP! UEFI BIOS
Operating system		SP-5B41: Open Box (Windows® Embedded Standard 7 Service Pack 1) SP-5B411/412: Windows® 10 IoT Enterprise 2019 LTSC 32 bit	UP! Windows® 11 IoT Enterprise 2024 LTSC (64 bit)*1
Buzzer		Yes	Yes

*1 OS is different between SP5000 and PSA6000. Some software might have no compatibility.

SP-5B411/412: Windows® 10 IoT Enterprise 2019 LTSC (32 bit)

PSA6000: Windows® 11 IoT Enterprise 2024 LTSC (64 bit)

1.3.3 General Specifications: SP-5700TP + SP-5B41 and PSA6000 15" (Atom)

General Specifications		
SP-5700TP + SP-5B41		PSA6000 15" (Atom)
Panel cut dimensions	W383.5 mm x H282.5 mm	W349.5 mm x H281.5 mm (No panel cut adapter available)
Panel thickness	1.6 mm to 5 mm	
External dimensions (including bezel)	W397.0 x H296.0 x D67 mm	W362.4 x H294.0 x D58.8 mm
Front bezel material	Aluminum	
Weight	4.5 kg or less	4.8 kg or less
Cooling method	Natural air circulation (fanless)	
Power supply	DC power supply : 24V	DC power supply: 24V
Power consumption	DC	When backlight is off: 27.5 W or less Max: 57 W When backlight is off: 30 W No power supplied to outside: 40 W Max: 50 W
Ambient air temperature	0...60 °C (32...140 °F)	0...50 °C (32...122 °F) (with an airflow velocity of 0.6 m/s) 0...40 °C (32...104 °F) (with no airflow)

1.3.4 Interface Specifications: SP-5700TP + SP-5B41 and PSA6000 15" (Atom)

Interface Specifications		
	SP-5700TP + SP-5B41	PSA6000 15" (Atom)
Serial (D-Sub 9-pin plug)	COM1: RS-232C/422/485 (non-isolated) COM2: RS-232C/422/485 (non-isolated) (default: RS-485, enable by launcher)	COM1: RS-232C (non-isolated) COM2: RS-422/485 (non-isolated) (default: RS-485, enable by BIOS)*1 *not support VCC(DC5V) output function of RS232C COM port
Disk	CFast Card 32 GB x 1 SDXC Card x1	UP! M.2 SSD 128GB as default, up to 512GB x2 supported
USB	USB Type-A x3 (2.0) USB Type-mini-B x1 (2.0) * *for transporting project file	UP! USB Type-A x2 (2.0) UP! USB Type-A x2 (3.1 Gen1) *Project transfer to be done via Ethernet USB Clamp is sold separately
Ethernet	IEEE802.3, 10BASE-T/100BASE-TX/1000BASE-T x2	UP! IEEE1588, 10 BASE-T/ 100 BASE-TX/1000BASE-T, Wake on LAN (WOL) supported x3 * When status is S4 (hybrid shutdown), Wake on LAN cannot be used.
Sound	Line input/Line output/Microphone input	Line output/Microphone input (Option: PFXYP6CVUSAU)
Video output	DVI-D Output Interface x 1	UP! Display port x1 (Dual mode supported)
Option Interface Slot	-	-

*1 Refer to PSA6000 Series User Guide Serial Interface>RS-422/485 Port Setting.

1.4 SP-5700WCD + SP-5B41 and PSA6000 15" W (Atom)

1.4.1 Display Specifications: SP-5700WCD + SP-5B41 and PSA6000 15" W (Atom)

Display Specifications		
	SP-5700WC + SP-5B41	PSA6000 15" W (Atom)
		
Display Type	TFT Color LCD (15.6" Wide)	
Display Resolution	FWXGA 1366 x 768	UP! FHD 1920 x 1080
Display Colors	262,144 colors	UP! Approx.16 million colors
Backlight	White LED (not user replaceable. When replacement is required, contact customer support.)	
Brightness control	101 levels (adjusted with touch panel or software)	
Backlight service life	50,000 hours or more (continuous operation at 25 °C [77 °F]-ambient temperature- before backlight brightness decreases to 50%)	
Brightness Sensor	Yes	None
Touch panel	Type	Projected Capacitive (multitouch)
	Mode	None

1.4.2 Performance Specifications: SP-5700WCD + SP-5B41 and PSA6000 15" W (Atom)

Performance Specifications			
		SP-5700WC + SP-5B41	PSA6000 15" W (Atom)
CPU		Atom E3825	UP! Atom X7425E
	Base frequency	1.33 GHz	UP! 1.50 GHz
	Max turbo boost frequency	-	UP! 3.40 GHz * *Default: enabled
	L2 cache	1 MB	UP! 6 MB
	Core number	2	UP! 4
	Thread number	2	UP! 4
Main memory		SP-5B41: DDR3L 1066 MHz - SDRAM 2 GB SP-5B411/412: DDR3L SDRAM 4 GB	UP! 260-pin DDR5 SO-DIMM socket x 1 (up to 16 GB/socket) UP! Support In-band ECC
Graphics accelerator		Intel® HD Graphics for Intel Atom® Processor Z3700 Series	UP! Intel® UHD Graphics
Security chip		-	UP! TPM 2.0
BIOS		Legacy BIOS	UP! UEFI BIOS
Operating system		SP-5B41: Open Box (Windows® Embedded Standard 7 Service Pack 1) SP-5B411/412: Windows® 10 IoT Enterprise 2019 LTSC 32 bit	UP! Windows® 11 IoT Enterprise 2024 LTSC (64 bit)*1
Buzzer		Yes	Yes

*1 OS is different between SP5000 and PSA6000. Some software might have no compatibility.

SP-5B411/412: Windows® 10 IoT Enterprise 2019 LTSC (32 bit)

PSA6000: Windows® 11 IoT Enterprise 2024 LTSC (64 bit)

1.4.3 General Specifications: SP-5700WCD + SP-5B41 and PSA6000 15" W (Atom)

General Specifications		
SP-5700WC + SP-5B41		PSA6000 15" W (Atom)
Panel cut dimensions	W396.0 mm x H277.0 mm	W394.0 mm x H250.0 mm <i>*Need a panel cut adapter (PFXZHAT7W1)</i>
Panel thickness	1.6 mm to 5 mm	
External dimensions (including bezel)	W414.0 x H295.0 x D69 mm	W406.4 x H262.4 x D58.8 mm
Front bezel material	Aluminum	
Weight	5.9 kg or less	4.9 kg or less
Cooling method	Natural air circulation (fanless)	
Power supply	DC power supply : 24V	DC power supply: 24V
Power consumption	DC	When backlight is off: 27.5 W or less Max: 42 W When backlight is off: 30 W No power supplied to outside: 45 W Max: 58 W
Ambient air temperature	0...60 °C (32...140 °F) 0...50 °C (32...122 °F) (with an airflow velocity of 0.6 m/s) 0...40 °C (32...104 °F) (with no airflow)	

1.4.4 Interface Specifications: SP-5700WCD + SP-5B41 and PSA6000 15" W (Atom)

Interface Specifications		
	SP-5700WC + SP-5B41	PSA6000 15" W (Atom)
Serial (D-Sub 9-pin plug)	COM1: RS-232C/422/485 (non-isolated) COM2: RS-232C/422/485 (non-isolated) (default: RS-485, enable by launcher)	COM1: RS-232C (non-isolated) COM2: RS-422/485 (non-isolated) (default: RS-485, enable by BIOS)*1 *not support VCC(DC5V) output function of RS232C COM port
Disk	CFast Card 32 GB x 1 SDXC Card x1	UP! M.2 SSD 128GB as default, up to 512GB x2 supported
USB	USB Type-A x3 (2.0) USB Type-mini-B x1 (2.0) * *for transporting project file	UP! USB Type-A x2 (2.0) UP! USB Type-A x2 (3.1 Gen1) *Project transfer to be done via Ethernet USB Clamp is sold separately
Ethernet	IEEE802.3, 10BASE-T/100BASE-TX/1000BASE-T x2	UP! IEEE1588, 10 BASE-T/ 100 BASE-TX/1000BASE-T, Wake on LAN (WOL) supported x3 * When status is S4 (hybrid shutdown), Wake on LAN cannot be used.
Sound	Line input/Line output/Microphone input	Line output/Microphone input (Option: PFXYP6CVUSAU)
Video output	DVI-D Output Interface x 1	UP! Display port x1 (Dual mode supported)
Option Interface Slot	-	-

*1 Refer to PSA6000 Series User Guide Serial Interface>RS-422/485 Port Setting.

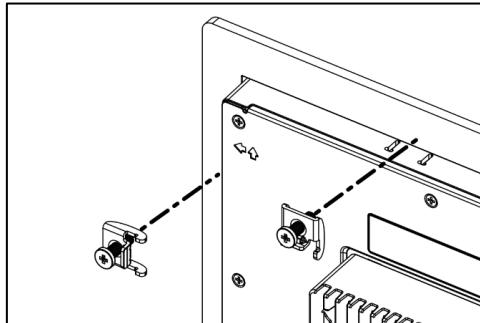
Chapter 2 Hardware Compatibility

2.1 Modularity and Installation

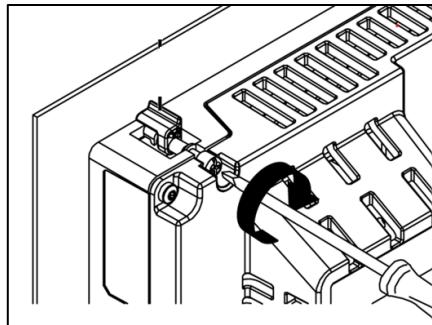
Modularity: PSA6000 has All in One structure where display and box unit cannot be separated.

Installation: SP5000 Open Box and PSA6000 have different installation methods and fasteners. Ensure that you read through the Installation Procedure Chapter of User guide for PSA6000.

Panel cut dimensions are different for SP5000 Open Box and PSA6000. Please be aware about the changes and refer to General Specifications for details.



Fasteners for PSA6000



Fasteners for SP5000 Open BOX

2.2 Accessories and Options

Following accessories are available for PSA6000:

Product Name	Product Number
M.2 SATA SSD 128 GB (Type 2280)	PFXYPSA6M2128L
M.2 SATA SSD 512 GB (Type 2280)	PFXYPSA6M2512L
DP-DVI Cable (5 m)*1	PFXYFPCBPDV5M
USB/Audio Conversion Cable	PFXYP6CVUSAU
Trellix license*2	PFXYP6LSMCA
USB Clamp Type A (5 pieces/set)	PFXZCCLUSA
Power connector (DC) (5 pieces/set)	PFXZC7CNACL1

*1 Passive Cable

*2 Trellix software is to increase security of the product. Please refer to the User Guide (Trellix Software chapter) for details and instructions of installation.

Note:

1. Gasket is not available as an accessory for PSA6000. Replacement of gaskets will be supported by product send-back.
2. Products may be changed or discontinued. Please refer to the website for latest information.

<https://www.pro-face.com>

Chapter 4 Compatibility of Software

4.1 Supported OS

The supported OS differ between SP5000 series and PSA6000 series.

OS	SP5000 series	PSA6000 series
Windows Embedded Standard 7 Service Pack 1 (32 bit)	Yes (PFXSP5B41)	No
Windows 10 IoT Enterprise 2019 LTSC (32 bit)	Yes (PFXSP5B411/412)	No
Windows® 11 IoT Enterprise 2024 LTSC (64 bit)	No	Yes

Due to the difference in the OS between SP5000 series and PSA6000 series, various operations and functionalities may be different.

4.2 OS login password

For PSA6000 series, it's necessary to set a login password at the first boot of the product to reduce the risk of intrusion and infection of malicious software and unauthorized access. Unlike SP5000 series, you cannot configure settings without a password. The conditions of login password are as follows.

No. of characters: From the usable characters below, at least 3 types and at least 8 characters are required. The sign-in password should not contain the character strings used in the account name.

Usable characters:

- Uppercase letters of European languages (A through Z, with diacritic marks, Greek and Cyrillic characters)
- Lowercase letters of European languages (a through z, sharp-s, with diacritic marks, Greek and Cyrillic characters)
- Base 10 digits (0 through 9)
- Non-alphanumeric characters (special characters): (~!@#\$%^&*_-+=`|¥() {}[];'"<>,.?/) Currency symbols such as the Euro or British Pound are not counted as special characters for this policy setting.
- Any Unicode character that is categorized as an alphabetic character but is not uppercase or lowercase. This includes Unicode characters from Asian languages.

4.3 Recovery USB

Recovery USB can be created for restore and back up of the system using commercially available USB memory from PSA6000 Launcher. Refer to the Recovery USB Chapter on the PSA6000 User Guide for detailed instruction.

4.4 Supported features in Launcher compatibility

Utility	Descriptions
Buzzer	Enable or disable the buzzer sound at the time of touch panel operation.
Write Filter	Enable or disable the Write Filter feature.
Shell	Hide the Windows® desktop. Using this custom shell feature allows you to restrain the Windows® features such as Control Panel.
Power	Used to operate power supply of this product in a state of custom shell.
System	Show the product's firmware, BIOS version, and OS version.
Window Locker	Fix a window display position at the time of application boot when an external display is used.

The difference of supported System features in Launcher is as shown below.

	PSA6000	SP5B411/412 (Windows 10)	SP5B41 (WES7)
Launcher	Supported	Supported	Supported
Buzzer	Supported	Not supported	Not supported
Brightness	Not supported*	Supported	Supported
Calibration	Not supported*	Supported	Supported
Front USB	Not supported	Supported	Supported
Write Filter	Supported	Supported	Supported
HORM	Not supported	Supported	Supported
Shell	Supported	Supported	Supported
Power	Supported	Supported	Supported
System	Supported	Supported	Supported
Window Locker	Supported	Not supported	Not supported
HMI Icon	Not supported	Supported	Supported
Task Changer / Task Switcher	Not supported	Supported	Supported
Eject	Not supported	Not supported	Supported
UART	Not supported	Supported	Supported

*Notes:

Brightness adjustment: To be performed from Windows brightness adjustment tool.

Calibration: Manual user calibration not required due to automatic calibration after power-on

4.5 Supported software and utilities

The software and utilities supported by PSA6000 series are as follows.

Software	Version
GP-Pro EX (WinGP)	To be supported later*
Pro-Server EX	To be supported later*
BLUE	4.1*
BLUE Open Studio	To be supported later*
Pro-face Connect (Link Manager)	11.5*
Pro-face Connect (Site Manager)	11.5*

5

Operations and functionalities of each supported software may be different on SP5000 and PSA6000.

Unlike SP5000 Open Box, PSA6000 requires separate Runtime license for GP-ProEX and BLUE.

*Current version could function but is not tested fully with PSA6000. Future version of the software will undertake testing with PSA6000.

4.6 BLUE Runtime License Manager

PSA6000 operates on BLUE 4.0 or later. So, for license activation and other detailed instruction, please refer to the BLUE manual from the following page:

<https://www.proface.com/en/product/soft/blue/top>

4.7 BLUE Project file

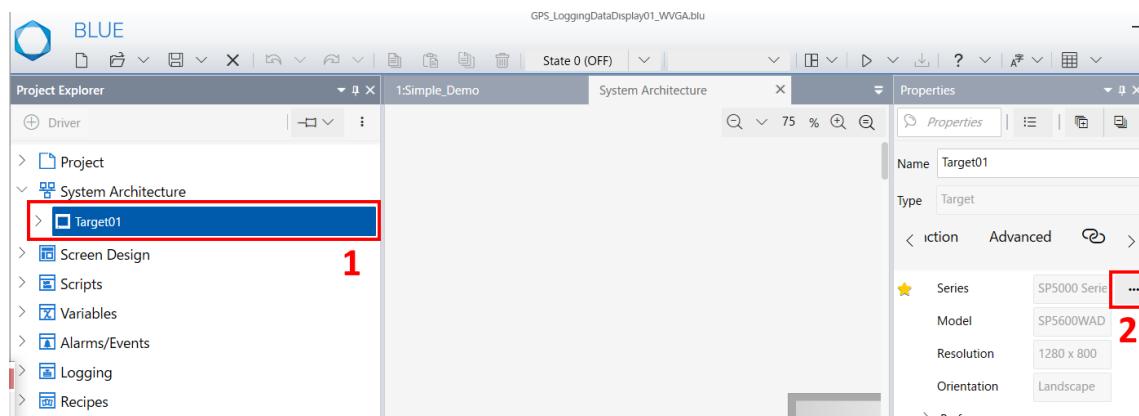
Please follow below step in BLUE, to use SP5000 project file on PSA6000.

1. Open the SP5000 project file on BLUE 4.0 or later build time

Resolve any warnings or errors that may be displayed.

2. Click **System Architecture > Target01 (1).**

3. Click 3 dots on the Series (2).



4. Select as below for New Display fields.

- **Type:** IPC or PC/AT
- **Resolution:** Select display size of PSA6000 (e.g. 12.1" inch wide = 1280x800(WXGA))
- **Orientation:** Landscape or Portrait *Usually same with current Display

- 5 Click OK.

4.8 BLUE historical data location

When IPC or PC/AT is selected, selection for logging data, for Logging and Alarm will be Backup Memory or USB Storage*1.

Below is the location of logging data for each selection.

Please be aware to re-assign the location when you change the project file to IPC or PC/AT from SP5000.

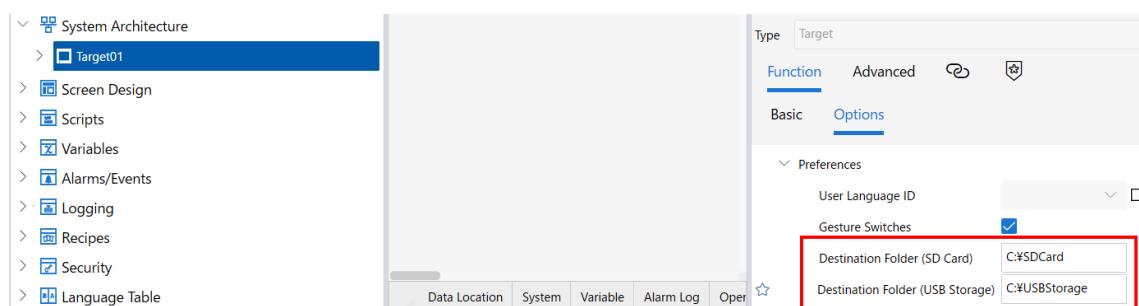


Backup Memory

Save to Folder will be automatically created in the C Drive.

USB Storage

Location can be assigned in System Architecture > Target01 > Function > Options > Destination Folder.



*1 simply selecting [USB Storage] will NOT store the alarm history in the USB storage inserted in the display

unit. To save the alarm history in the USB storage, specify the destination folder in the [Destination Folder (USB Storage)]

4.9 Software notice when Writer Filter is enabled

When Write Filter(UWF) is enabled, data will be reset when restarting the product.

Software data such as variable data, will be also reset. If you need to avoid this, please create symbolic link of software folder to second device or external device

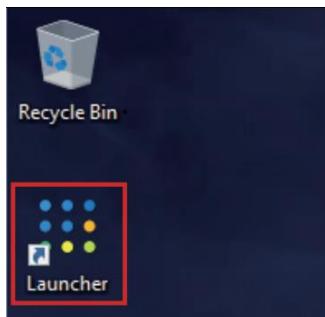
Default software folder :

BLUE : "C:\ProgramData\Pro-face\BLUE Runtime"

Example of creating BLUE symbolic link folder C:\ProgramData\Pro-face\BLUE Runtime

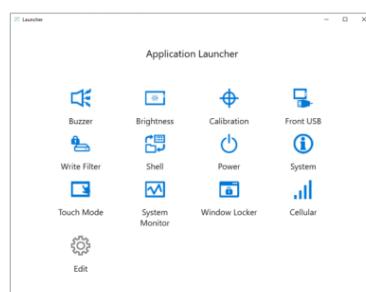
1. Disable Unified Write Filter

a. Start Launcher from the shortcut icon on the Desktop

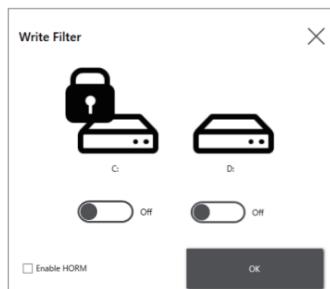


b. Select Write Filter from Launcher top screen

If Write Filter is not displayed on the Launcher top screen, click on Edit to display Write Filter



c. Disable (Off) Write Filter on C:



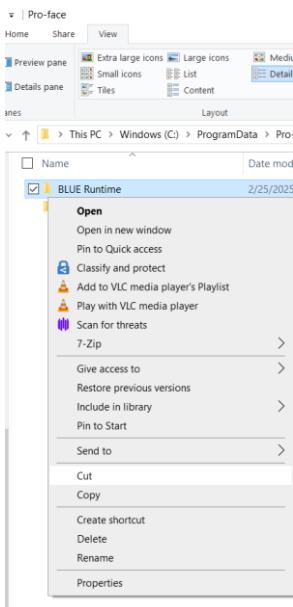
Toggle the switch to Off

2. Create a new folder D:\PSA6000.

3. Cut and paste BLUE Runtime folder from the C:\ProgramData\Pro-face to D:\PSA6000 folder.

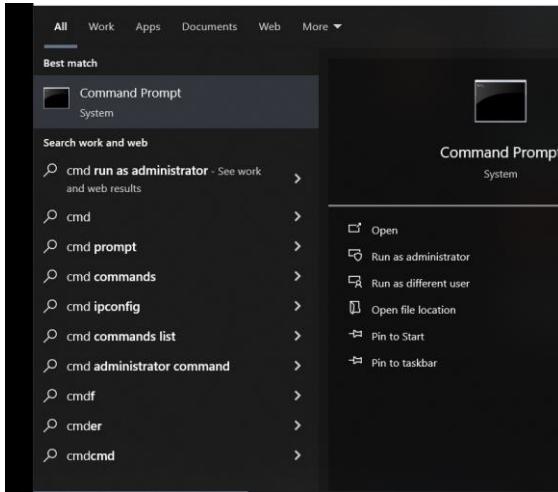
Ensure to Cut and Paste, and **not** to Copy and Paste

Note: C:\ProgramData is a hidden folder by default in Windows. Please enable Hidden items from View menu on Windows Explorer Window.



Folder to Cut from C: drive.

4. Click Windows Start button > Open Command Prompt as Administrator



4. Input < **mklink /D "C:\ProgramData\Pro-face\BLUE Runtime" "D:\PSA6000\BLUE Runtime"** > and press Enter key.

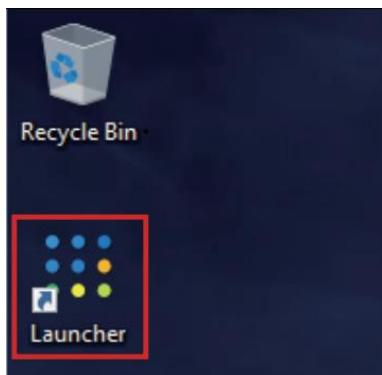
After successful creation of the symbolic link, there will be following message:

"symbolic link created for C:\ProgramData\Pro-face\BLUE Runtime <<=====> D:\PSA6000\BLUE Runtime"

```
C:\>mklink /D "C:\ProgramData\Pro-face\BLUE Runtime" "D:\PSA6000\BLUE Runtime"
symbolic link created for C:\ProgramData\Pro-face\BLUE Runtime<<=====>D:\PSA6000\BLUE Runtime
```

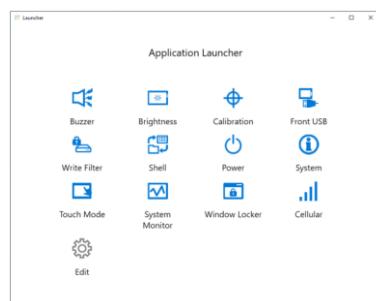
5. Enable Write Filter for C: drive

- Start Launcher from the shortcut icon on the Desktop

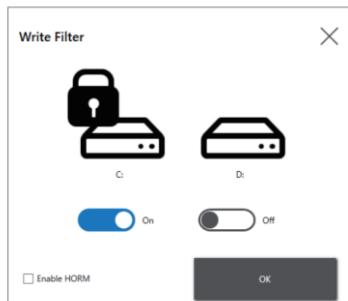


- Select Write Filter from Launcher top screen

If Write Filter is not displayed on the Launcher top screen, click on Edit to display Write Filter



- Enable (On) Write Filter on C:



Toggle the switch to On.

Only Alarm, logging and historical data needs to avoid the reset, changing the save folder to external device will resolve this concern.

However, even in this case, PSA6000 needs to be shut down correctly from Windows. If there is a shut down from other cases (e.g. power supply cut-off to PSA6000), data could be damaged and could cause issues in saving.

Using the symbolic link to protect variable data from resetting require two separate storage drives.
(Symbolic link will not work properly for virtually partitioned drives)