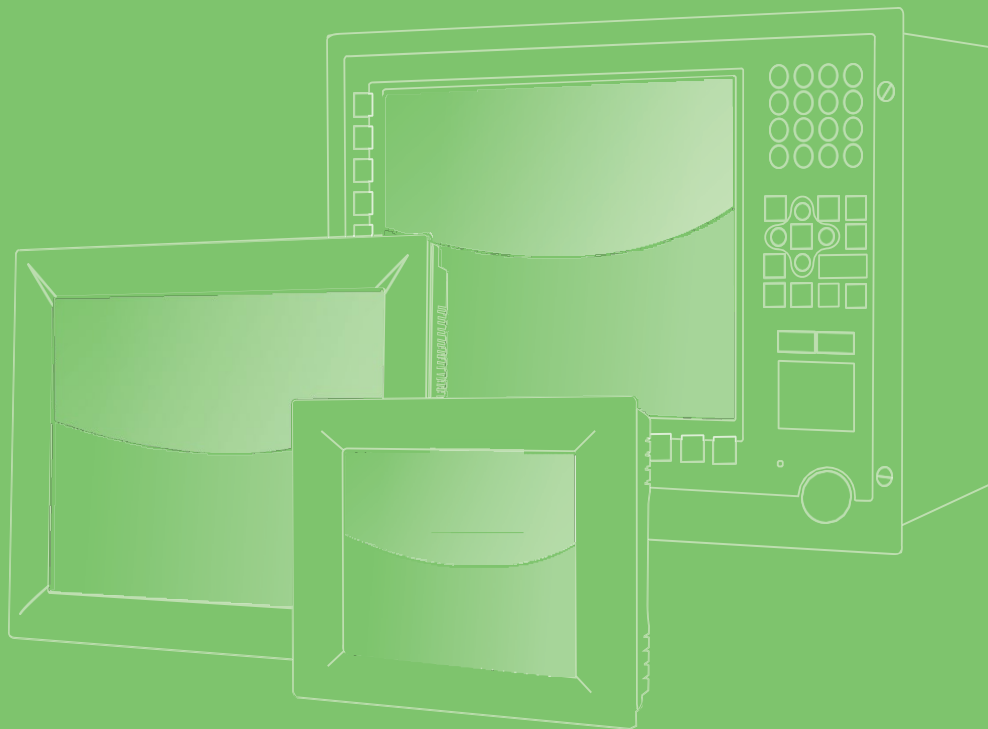


Startup Manual



FPM-S Series:

FPM-S15W

FPM-S18W

FPM-S21W

Interchangeable Slim Bezel Display Modules

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Chapter 1

Installation

1.1 Confirm Your TPC and FPM Products

The FPM-S display modules are equipped with positioning pillars to simplify installation, enabling users to confirm the correct placement before securing with a screwdriver. However, due to size differences within the FPM-S series, some models may not be compatible with certain TPC models. Therefore, it is essential to ensure you have selected the correct TPC product.

Warning! The FPM-S15W display module cannot be installed with the TPC-B610 series.

Warning! Avoid prolonged exposure of FPM-S products to direct sunlight. Continuous sunlight on the LCD screen can cause overheating and potential damage, as the components are not designed to withstand high temperatures. This can significantly reduce the lifespan of the LCD.

Table 1.1: Specifications

Part Number for Cost Effective Version		FPM-S15W	FPM-S18W	FPM-S21W
LCD Panel	Display Size	15.6"	18.5"	21.5"
	Display Type	FHD TFT LED LCD		
	Aspect Ratio	16:9	16:9	16:9
	Max. Resolution	1920 x 1080	1920 x 1080	1920 x 1080
	Max. Color	16.2M	16.7M	16.7M
	Luminance	500 ntis	350 ntis	250 ntis
	Viewing Angle (H/V)	178°/178°	170°/160°	178°/178°
	Backlight Life	50,000 hr	50,000 hr	50,000 hr
	Contrast Ratio	800:1	1000:1	1000:1
Touchscreen	Type	PCAP	PCAP	PCAP
	Light Transmission	Above 90%	Above 90%	Above 90%
	Anti-Glare Treatment	Yes	Yes	Yes
Environment	Operating Temperature	0 ~ 50 °C (32~122 °F)	-10 ~ 60 °C (14 ~ 140 °F)	0 ~ 55 °C (32 ~ 131 °F)
	Storage Temperature	-20 ~ 60 °C (-4 ~ 140 °F)	-20 ~ 60 °C (-4 ~ 140 °F)	-20 ~ 60 °C (-4 ~ 140 °F)
	Ingress Protection	Font IP66	Font IP66	Font IP66
Housing Color	Panel Frame and Back Cover	Pantone 432C	Pantone 432C	Pantone 432C

1.2 Installing FPM-S15W with TPC System

1.2.1 Positioning Pillars of FPM-S15W

The four positioning pillars, which are crucial for ensuring correct installation, are clearly highlighted by the red boxes in the diagram below (Figure 1.1).

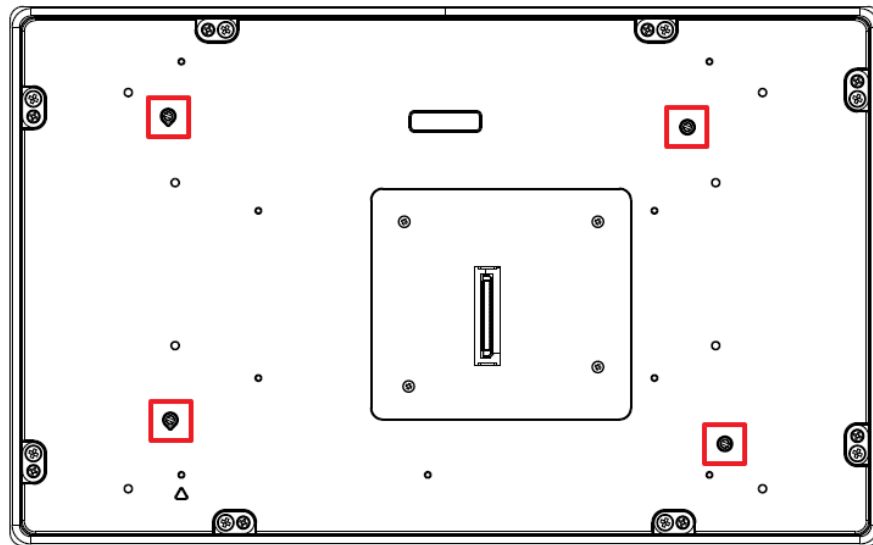


Figure 1.1 FPM-S15W Rear View and Positioning Pillars

1.2.2 Secure TPC with FPM-S15W

Use the screws from the accessory box to firmly attach your FPM-S and TPC products. The following diagrams (Figure 1.2, Figure 1.3 & Figure 1.4) illustrate how to secure the FPM-S15W with various models of the TPC series. The red guidelines indicate where the five screws should be placed for secure fastening.

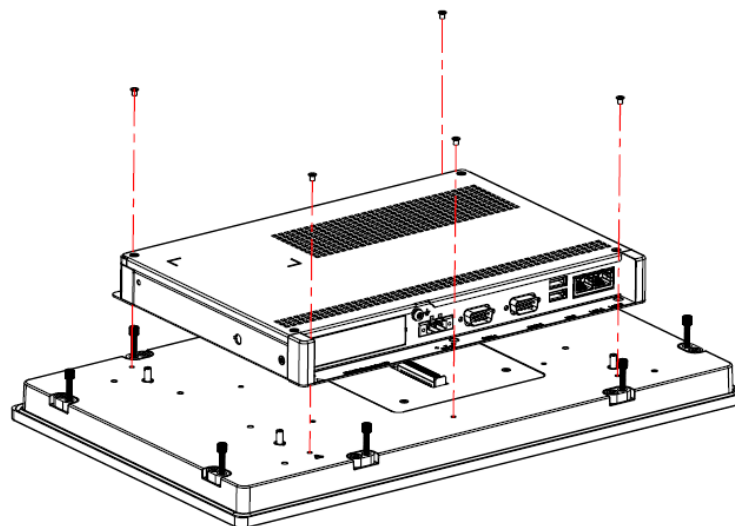


Figure 1.2 Installing TPC-B300 onto the FPM-S15W

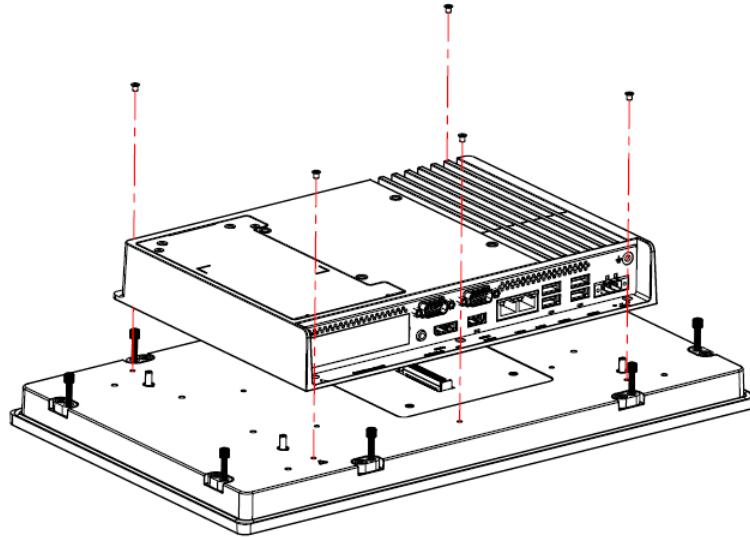


Figure 1.3 Installing TPC-B510 onto the FPM-S15W

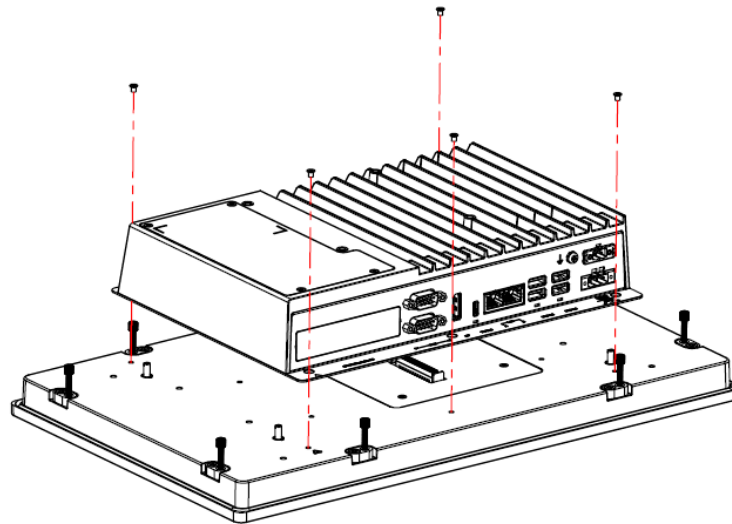


Figure 1.4 Installing TPC-B520 onto the FPM-S15W

1.3 Installing FPM-S18W/S21W with TPC System

1.3.1 Positioning Pillars of FPM-S18W/S21W

If the FPM-S you purchased is larger than 15" and is paired with TPC products from the TPC-B300, TPC-B510, or TPC-B520 series, the default positioning pillars of the FPM-S do not need to be changed. However, if you are switching from the TPC-B610 series to another series, you must verify whether the positioning pillar locations align with those marked by the red boxes in the diagram below (Figure 1.5).

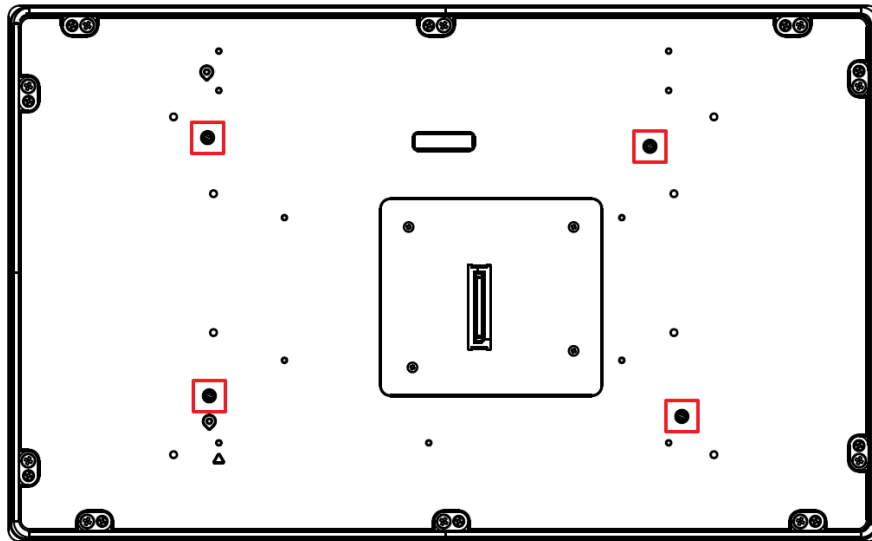


Figure 1.5 Positioning Pillars for TPC-B300/B510/ B520

For the TPC-B610 series, it is necessary to adjust the positions of the positioning pillars, as shown in Figure 1.6. Using a slotted screwdriver, unscrew the positioning pillars by turning them counterclockwise, then reposition them to the correct locations. Please refer to Figure 1.6, where the positioning pillars have already been correctly relocated.

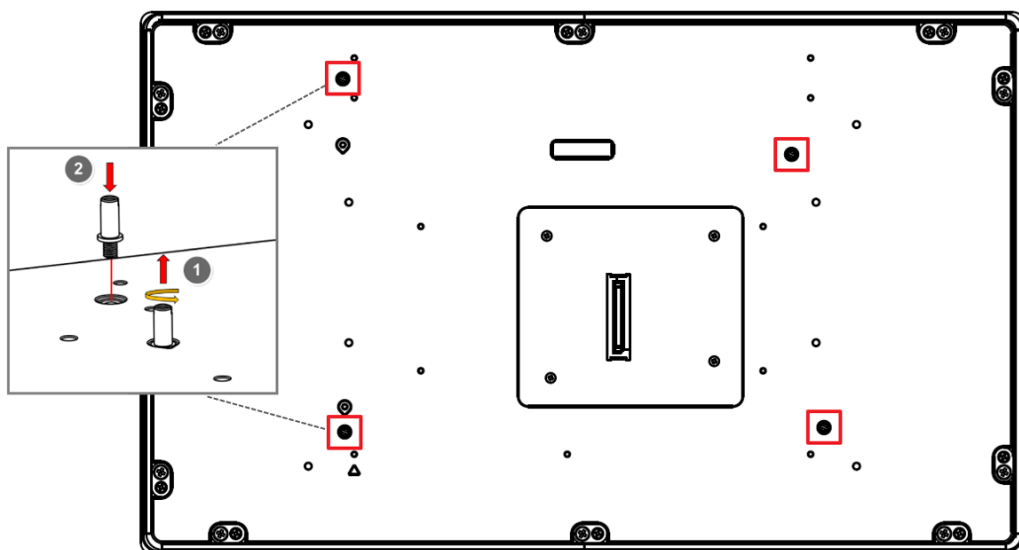


Figure 1.6 Positioning Pillars for TPC-B610

1.3.2 Secure TPC with FPM-S18W/S21W

Use the screws from the accessory box to firmly attach your FPM-S and TPC products. The following diagrams (Figure 1.7, Figure 1.8, Figure 1.9 & Figure 1.10) illustrate how to secure the FPM-S18W/S21W with various models of the TPC series. The red guidelines indicate where the five screws should be placed for secure fastening.

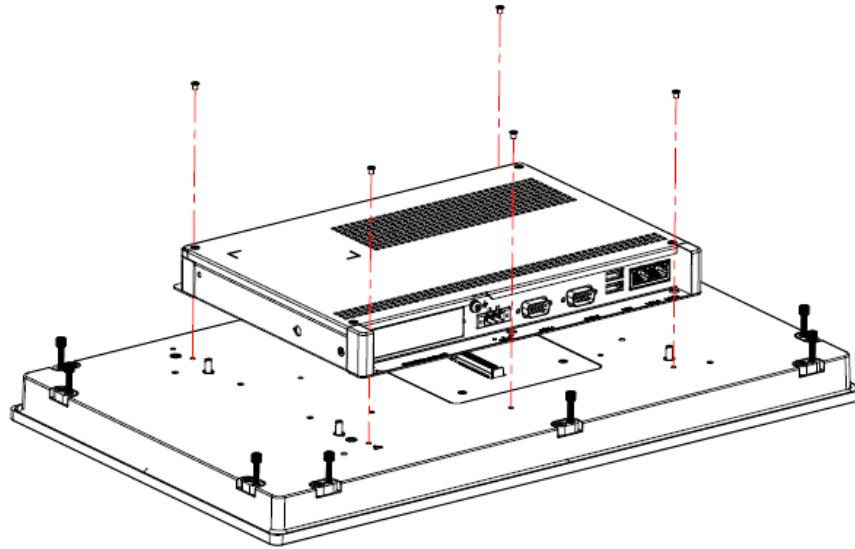


Figure 1.7 Installing TPC-B300 onto FPM-S18W/S21W

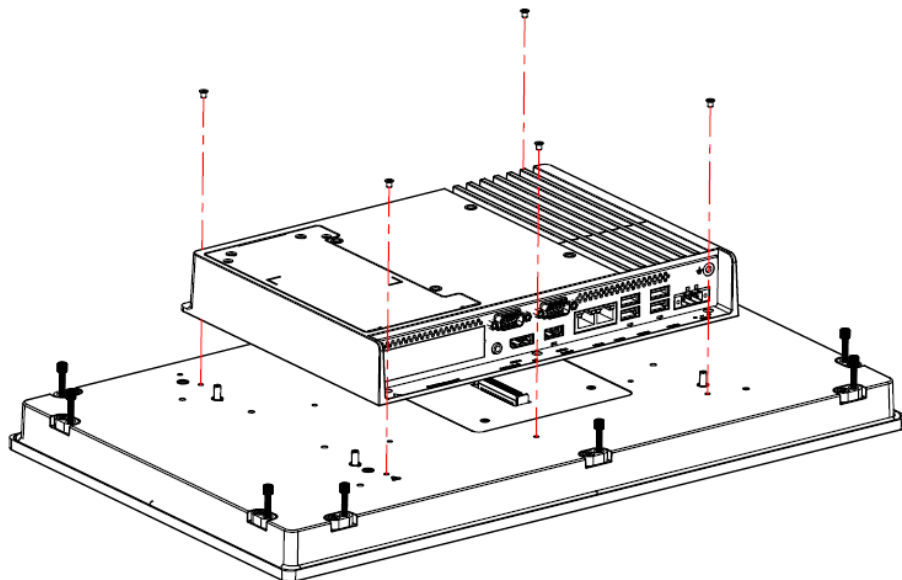


Figure 1.8 Installing TPC-B510 onto FPM-S18W/S21W

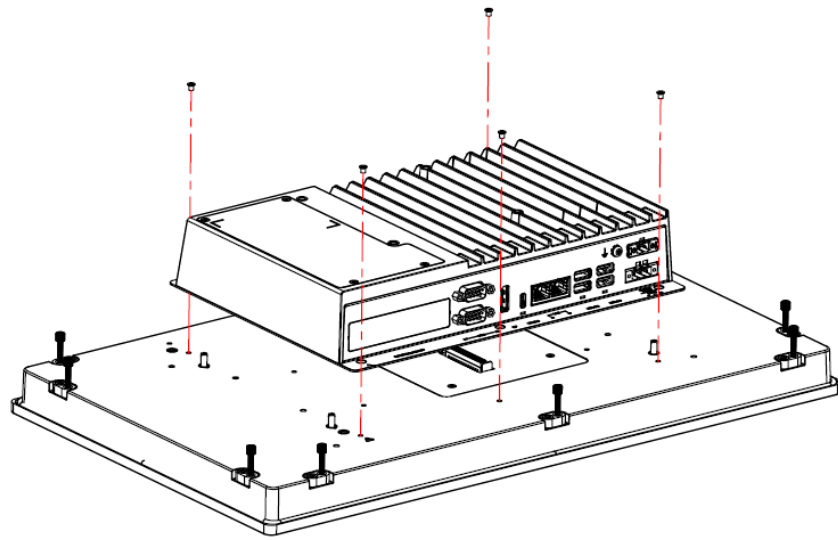


Figure 1.9 Installing TPC-B520 onto FPM-S18W/S21W

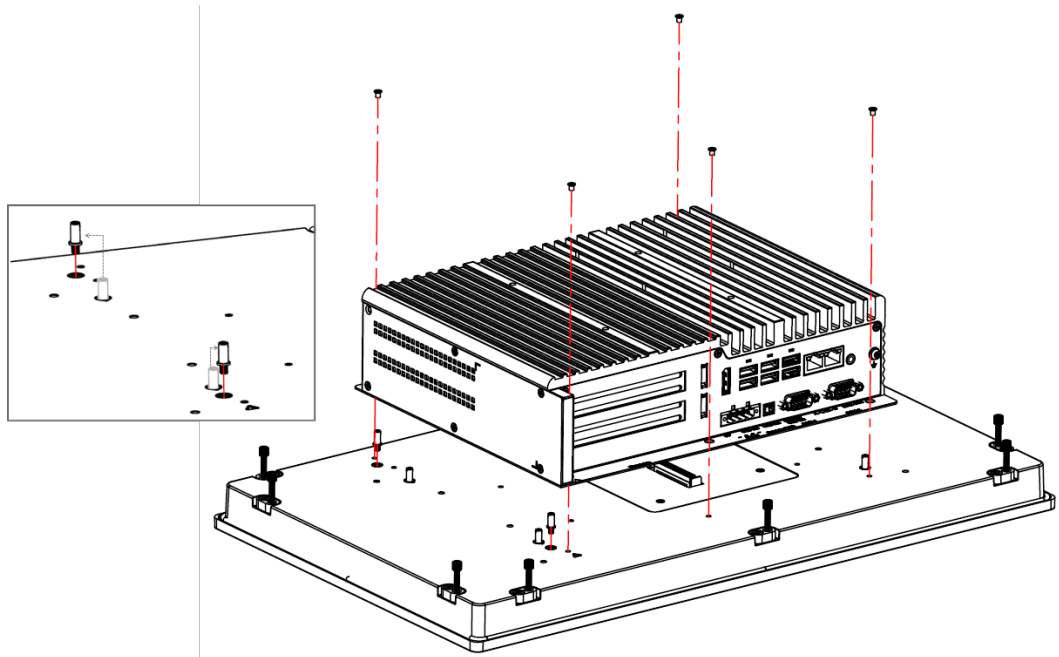
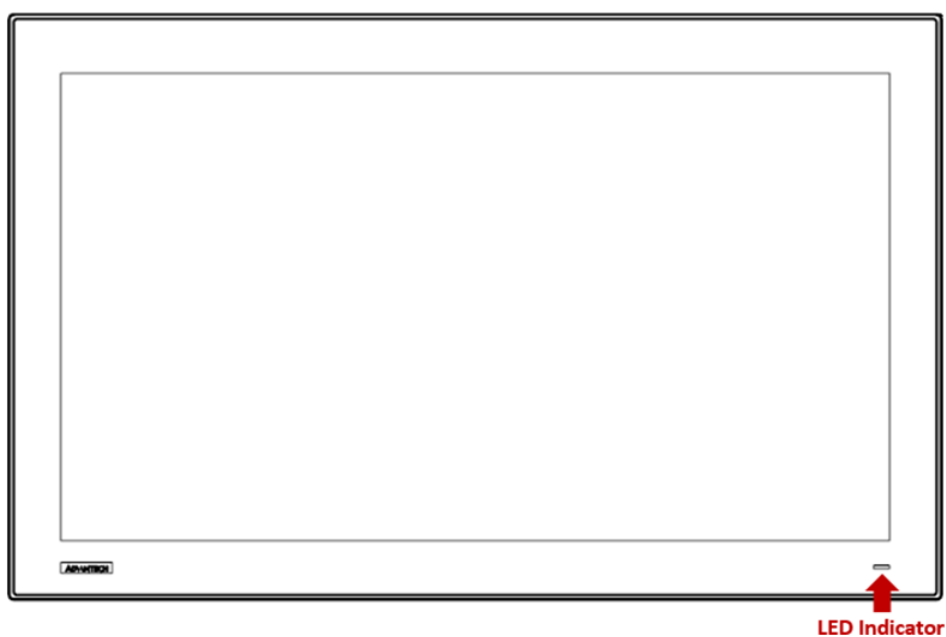


Figure 1.10 Installing TPC-B610 onto FPM-S18W/S21W

Chapter 2

LED Status Indicator

2.1 LED Status Indicator on FPM-S Display



Indicator	Default Status (ErP Enable)	Status 2 (ErP Disable)
Green	Normal Powered-On State	Normal Powered-On State
Orange	Sleep (S3) / Hibernate (S4)	Sleep (S3) / Hibernate (S4) / Shutdown(S5)
No Light	Shutdown(S5)/Power Off	Power Off

Chapter 3

Panel Mounting

3.1 Panel Mounting

1. There is an adhesive waterproof gasket on the front bezel of the FPM-S display module. Make sure the waterproof gasket is in position before installing it into the panel opening.
2. Install the FPM+TPC into the panel opening. The suggested mounting panel thickness is less than 6 mm (0.236 in).

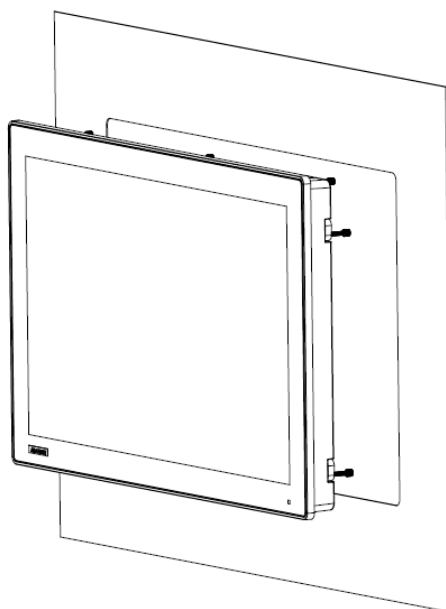


Figure 3.1 Installing FPM+TPC into the Panel Opening

3. On the back of the FPM-S, find the mounting screws. Simply turn them counter-clockwise by hand until they loosen. This will allow you to rotate the brackets to a mounting position.

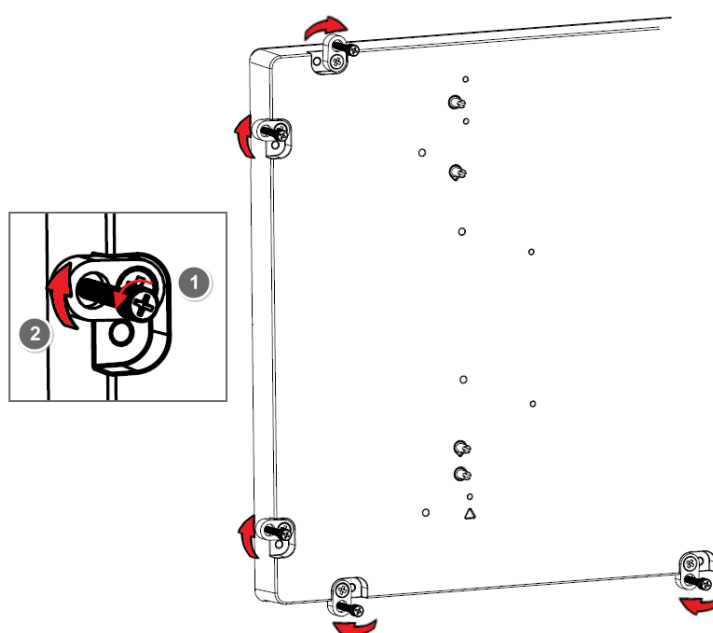


Figure 3.2 Panel Mounting – Loosen Mounting Screws

4. Ensure the brackets remain in place, then tighten the screws by turning them clockwise to a torque setting of 5 kgf-cm. This action will press the mounting panel firmly in place, ensuring a stable installation.

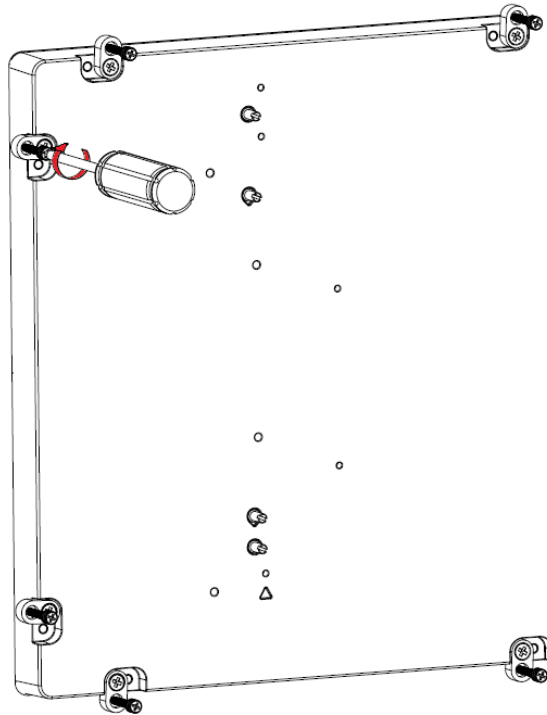
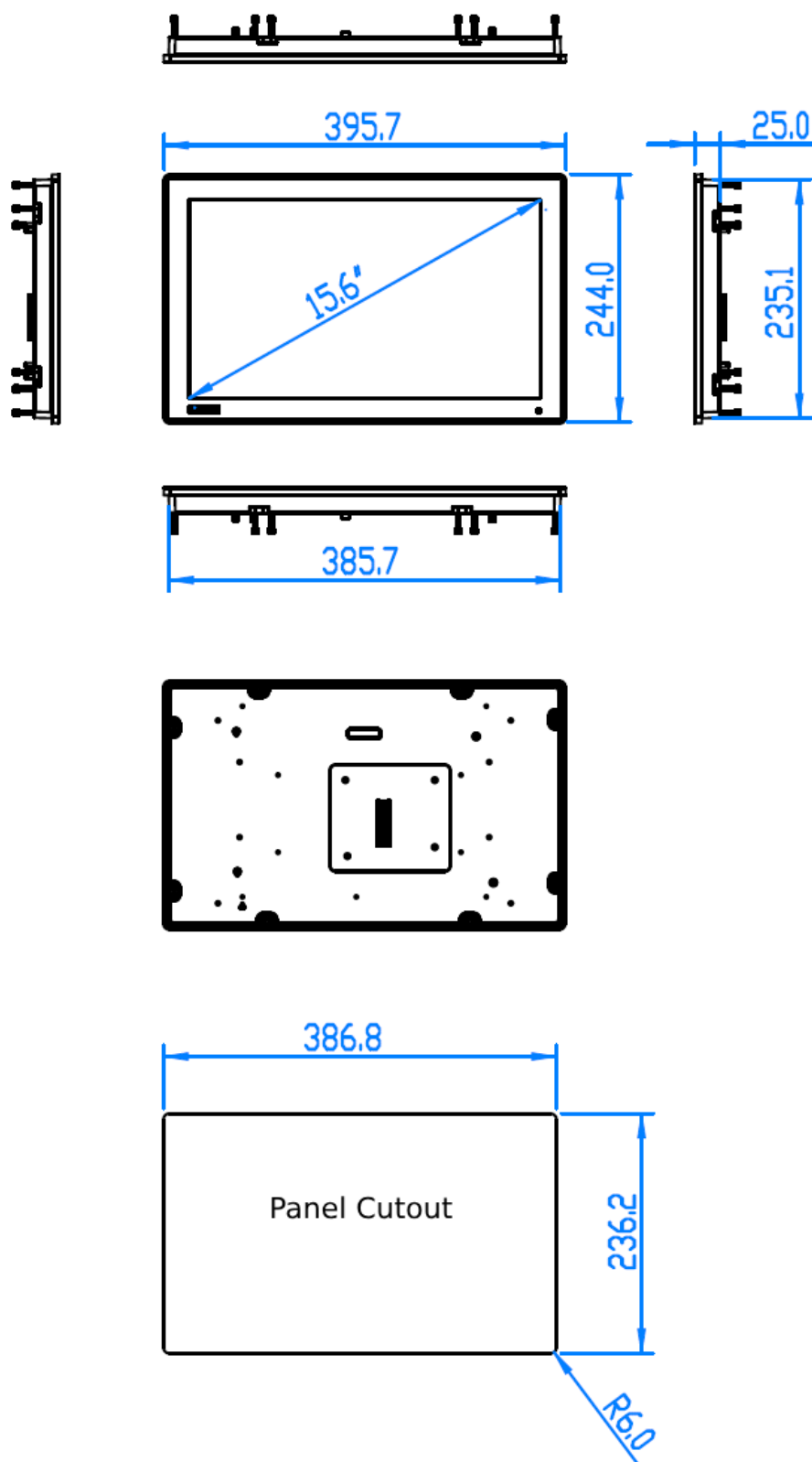


Figure 3.3 Panel Mounting – Fixing

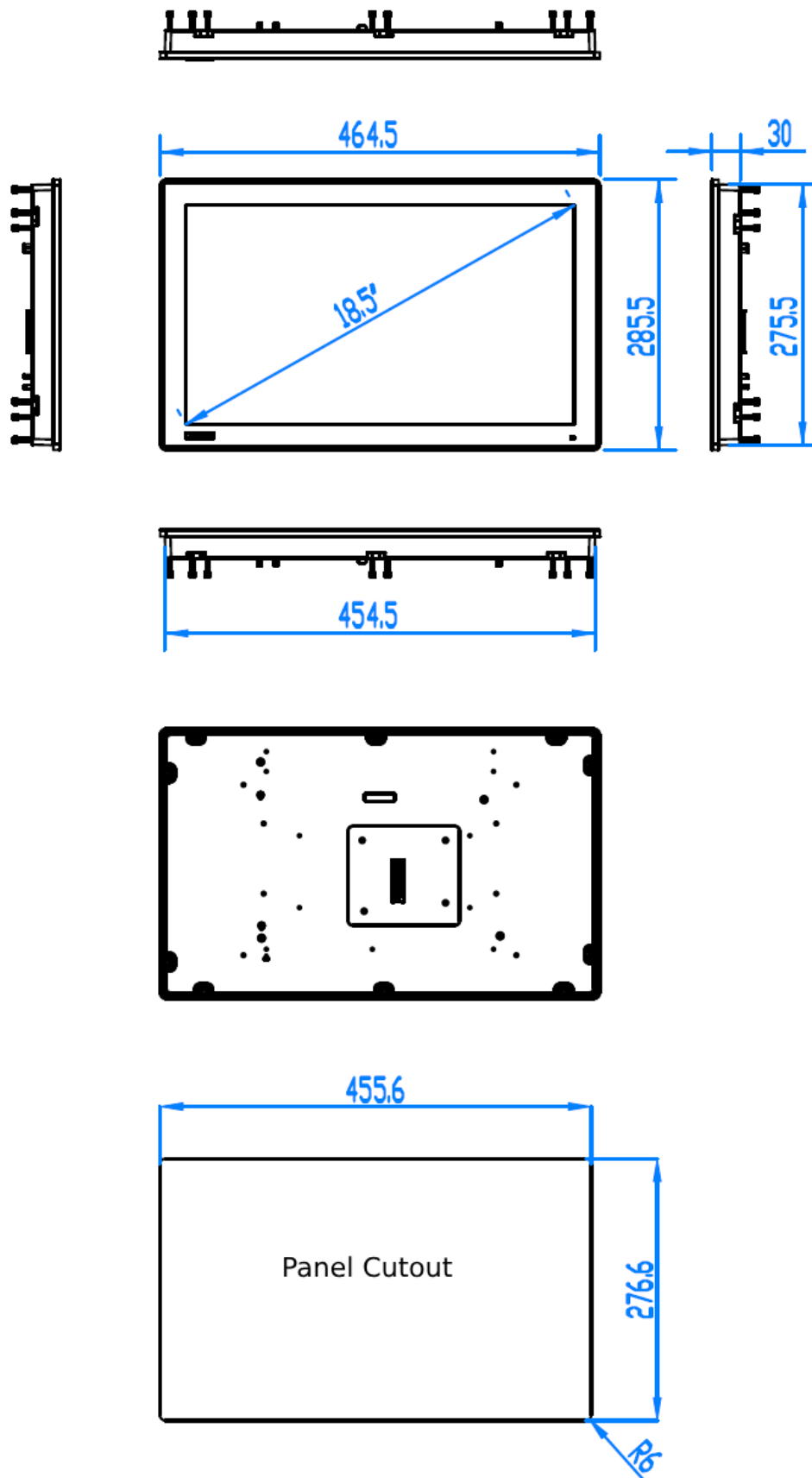
3.2 Dimensions

3.2.1 FPM-S15W



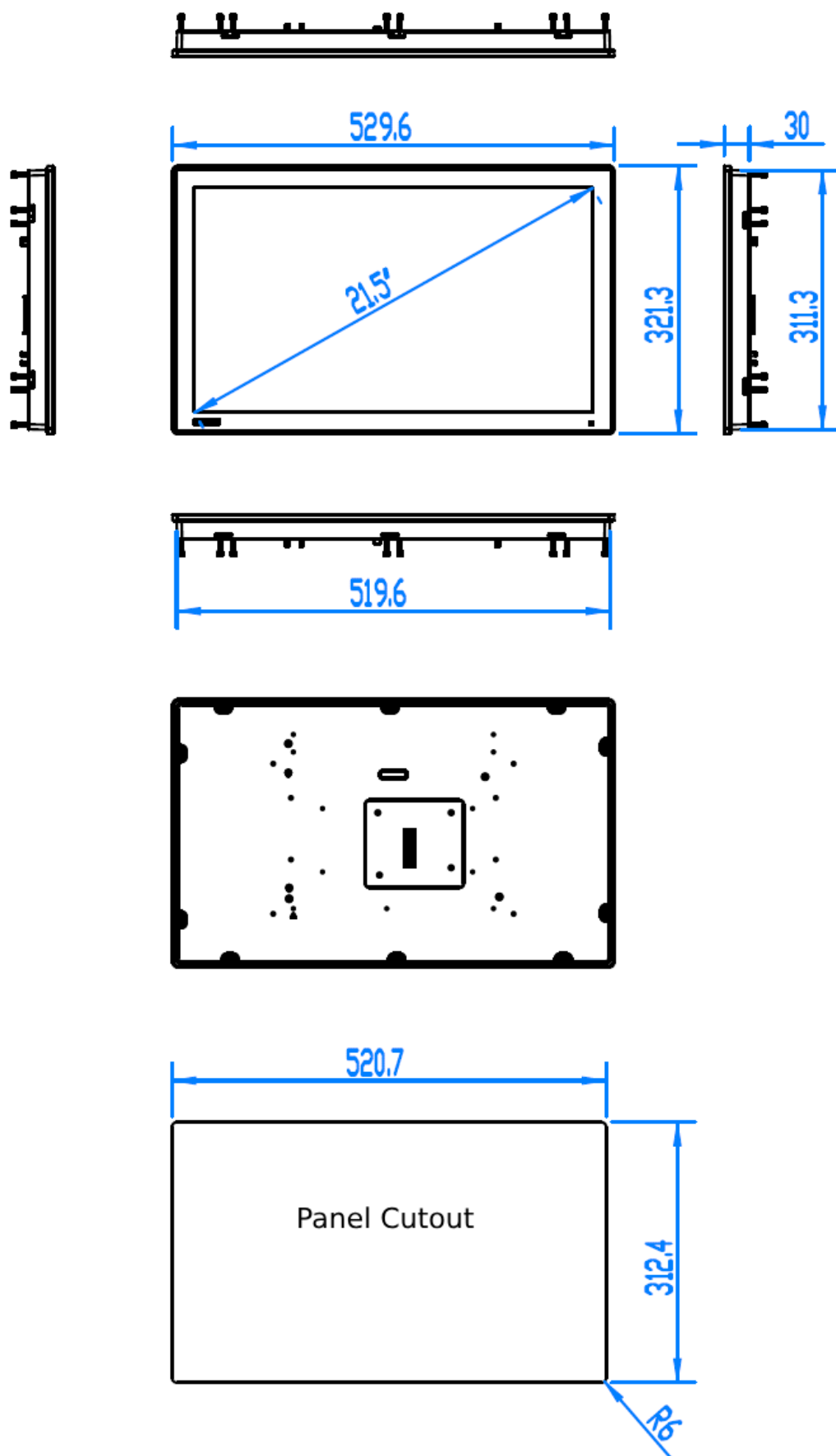
Panel Cutout Dimensions: 386.8 x 236.2mm, corner=R6mm (± 0.5 mm)

3.2.2 FPM-S18W



Panel Cutout Dimensions: 455.6 x 276.6mm, corner=R6mm (± 0.5 mm)

3.2.3 FPM-S21W



Panel Cutout Dimensions: 520.7 x 312.4mm, corner=R6mm (± 0.5 mm)



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