

PPC-310S ASL

PPC-312S ASL

10.4"/12.1" Fanless Panel PC with Intel® X7433RE Quad-Core Processor



Features

- True-flat touchscreen with Industrial-grade LCD panel
- Intel® Amston Lake X7433RE 3.4 GHz quad-core processor
- Slim Compact, fanless design with aluminum alloy enclosure
- IP66-rated front panel
- Supports dual displays (1 x external DP)
- Supports 1 x M.2 M Key 2242/2280 (SATA or PCIe x 1); 1 x 2.5" SATA bay (optional)
- Supports 1 x M.2 B key(2242 or 3052) (SATA, PCIe X1 ,USB 3.0 & SIM slot);
- Supports VESA 75
- Support iDoor
- Support PCI or PCIe



Introduction

PPC-300S ASL is a high-value, ultra-slim panel PC equipped with TFT LCD, and low-power Intel® X7433RE quad-core, 3.4GHz, processor to provide highperformance computing in a compact and fanless system. For high durability and functionality, the PPC-300S ASL features an IP66-rated front panel, die cast aluminum alloy enclosure, two serial ports, four USB ports, and two GbE LAN ports, making it suitable for diverse industrial applications.

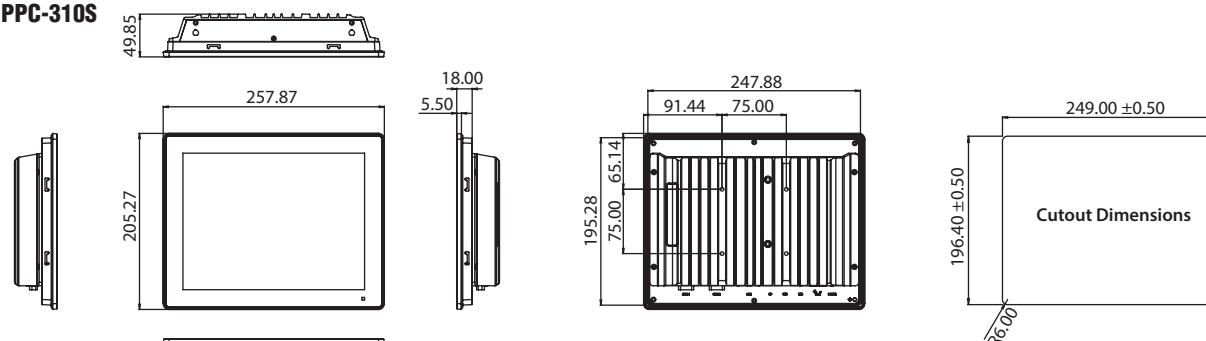
Specifications

System	CPU	X7433RE	
	Core	4	
	Frequency	3.4GHz	
	Cache	6 MB	
	Memory	1 x SODIMM, DDR5 4800MHz, max. 16GB	
	Storage	1 x M.2 M key slot (2242/2280, SATA &PCIe x1) 1 x 2.5" SATA bay (optional)	
	Network (LAN)	2 x 10/100/1000/2500 Mbps Ethernet (Intel I226 LM)	
	I/O	2 x RS-232/422/485 2 x USB3.2, 2 x USB2.0 1 x DP	
	Expansion	1 x M.2 B key slot (2242 or 3052) (SATA, PCIe X1, USB 3.0 & SIM slot)** 1 x M.2 E key slot (2230) for wireless(PCIe x1 & USB2.0) 1 x iDoor (optional) 1 x PCI or PCIe x1 (optional) 2 x USB + GPIO module (optional)***	
	Watchdog Timer	255 timer levels; setup by software	
Security	1 x TPM2.0 (on board as default)		
Speaker	1 x 2W		
Model		PPC-312S	PPC-310S
LCD	Display Type	12.1" TFT LCD (LED backlight)	10.4" TFT LCD (LED backlight)
	Max. Resolution	1024 x 768	1024 x 768
	Viewing Angle	89 (left), 89 (right), 89 (up), 89 (down)	88 (left), 88 (right), 88 (up), 88 (down)
	Luminance (cd/m²)	500	
	Contrast Ratio	1000	
	Backlight Lifetime	30,000 hr (min.)	50,000 hr (min.)
Touchscreen	Touchscreen type	5 wire resistive touch or P-CAP	
	Light Transmission	80±5%	
	Controller	USB interface	
Physical Characteristics	Dimensions	295.3 x 233.8 x 49.9 mm (11.6 x 9.2 x 2.0 in)	257.9 x 205.3 x 49.9 mm (10.2 x 8.1 x 2.0 in)
	Weight	2.79 kg (6.15 lb)	2.46kg (5.42lb)
OS Support	OS Support	Windows 10 LTSC, Windows 11, Linux, Andriod	
Power Comsumption	Input Voltage	24V _{DC} ± 30%	
	Power Consumption	35W	30W
Environment	Operating Temperature	-20 ~ 60 °C (-4 ~ 140 °F)	
	Storage Temperature	-40 ~ 80 °C (-40 ~ 176 °F)	
	Relative Humidity	95% @ 40 °C (Non-Condensing)	
	Shock	Operating 10 G Peak Acceleration (11 ms Duration), Follows IEC 60068-2-27	
	Vibration	Operating Random Vibration Test 5~500Hz, 2Grms @with SSD, Follows IEC 60068-2-64	
	EMC	CE,FCC Class B, BSMI, EN60601-1-2, UKCA	
	Safety	CB, UL, CCC, UKCA	
	Front Panel Protection	IP66 compliant	

Dimensions

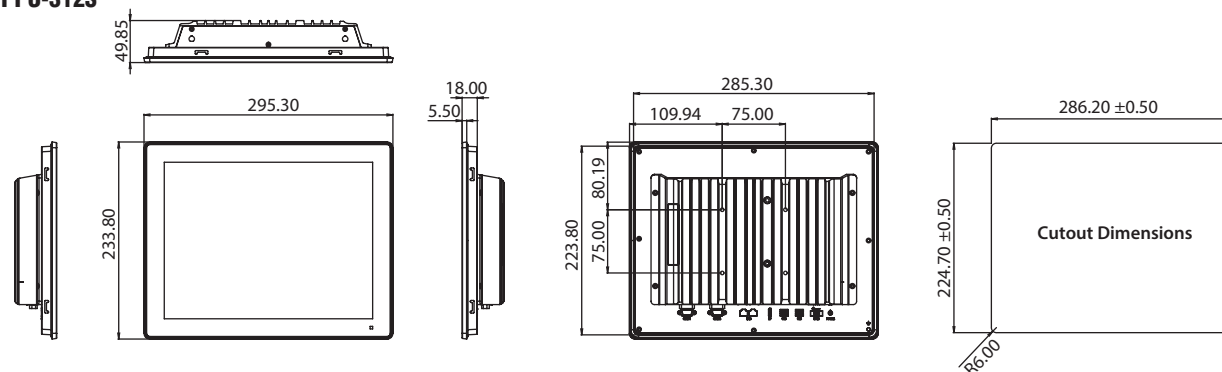
Unit: mm

PPC-310S



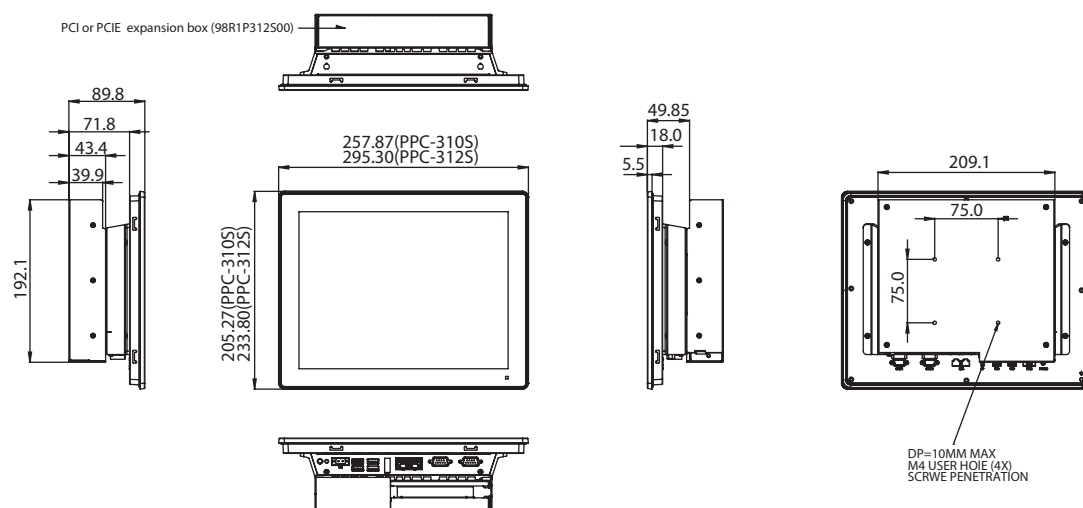
Panel Cutout Dimensions: 249 x 196.4 mm (9.81 x 7.74 in)

PPC-312S



Panel Cutout Dimensions: 286.2 x 224.7 mm (11.27 x 8.85 in)

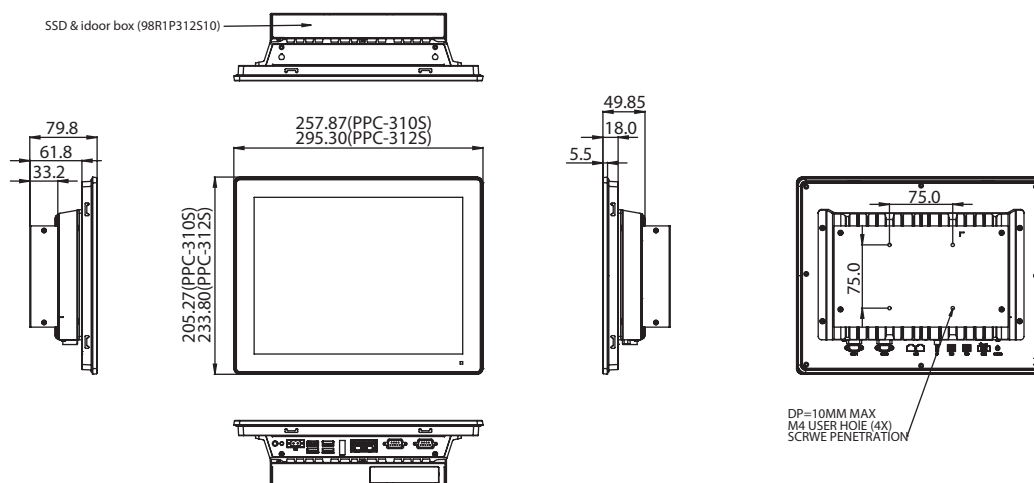
PPC-310S/312S with PCI or PCIe Expansion Box (98R1P312S00)



Dimensions

Unit: mm

PPC-310S/312S with SSD & iDoor Expansion Box (98R1P312S10)



Ordering Information

Part Number	Description
PPC-310S-RX7A	10.4" PPC w/Intel x7433RE, Res.
PPC-310S-PX7A	10.4" PPC w/Intel x7433RE, Pcap
PPC-312S-RX7A	12.1" PPC w/Intel x7433RE, Res.
PPC-312S-PX7A	12.1" PPC w/Intel x7433RE, Pcap
96PSA-A90W190T-3	Power adapter 100-240V 90W 19V
1702002600	Power Cable UL/CSA (USA) 180D 125V10A 1.83M
1702002605	Power Cable 90D 220V EUROPEAN 250V/6A 1.8M
1700000237	Power Cord PSE 3P 12A 125V 183cm
96CB-POWER-B-1.8MA	Power code 3P CCC(China) 1.8M
PPC-174T-WL-MTE	Wall mount kit for PPC series
PPC-STAND-A1E	Stand for PPC series
PPC-ARM-A03	ARM VESA Standard for PPC series
PPC-WLAN-D2	M.2, WiFi6 +BT5.2, 2T2R, w/Antenna
98R3P300010	PPC-300 RFID, Read only 13.56MHz&125k
98R1P312S00	Add-on box for PCI or PCIe expansion (include PCI / PCIe riser card)*
98R1P312S10	Add-on box for SSD & iDoor expansion
98R1P300S10	Additional ports module (2 x USB 2.0 + 1 x GPIO)***

* PCIe riser card supports PCIe x1 singal, but the slot is PCIe x4 (PCIe x1 compatible).

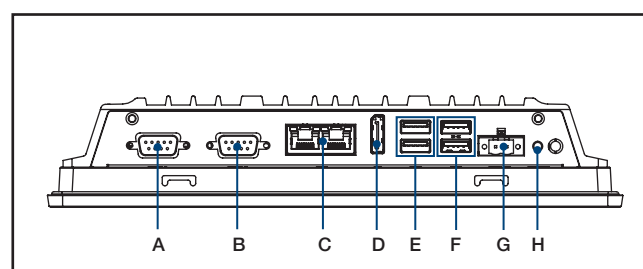
** For Storage,choose either the B key or the 2.5" SATA bay.

**** iDOOR, additional ports or 2.5" SATA bay can't be installed in the same time since they share the same space

Support iDoor Modules

Part Number	Description
PCM-34R1TP-AE	1 port Gigabit Ethernet, Intel® I225, 2.5Gb/s, TSN
PCM-34R2GL-AE	2 ports Gigabit Ethernet, Intel® I350
PCM-34D2R4-AE	2 ports Isolated RS-422/485, DB9
PCM-34D2R2-AE	2 ports Isolated RS-232, DB9
PCM-34D4R4-AE	4 ports non-isolated RS-422/485, DB37 cable
PCM-34D4R2-AE	4 ports non-isolated RS-232, DB37 cable
PCM-37D24DI-AE	4 channels isolated digital I/O with counter, DB37
PCM-23C1CF-BE	1 slot Cfast iDoor for CFast

I/O View



A. COM1: RS-232/422/485

B. COM2: RS-232/422/485

C. 2 x LAN

D. DP

E. 2 x USB 3.2

F. 2 x USB 2.0

G. DC-In

H. Power Button

Please note: If some optional modules are offered with the system, additional system certificates may be required in certain regions/countries.
Please contact Advantech for certificate compliance.