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 2280 (SATA or PCIe x 1); 1 x 2.5" SATA bay (optional)
- Supports 1 x M.2 B keyt(2242 or 3052) (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.
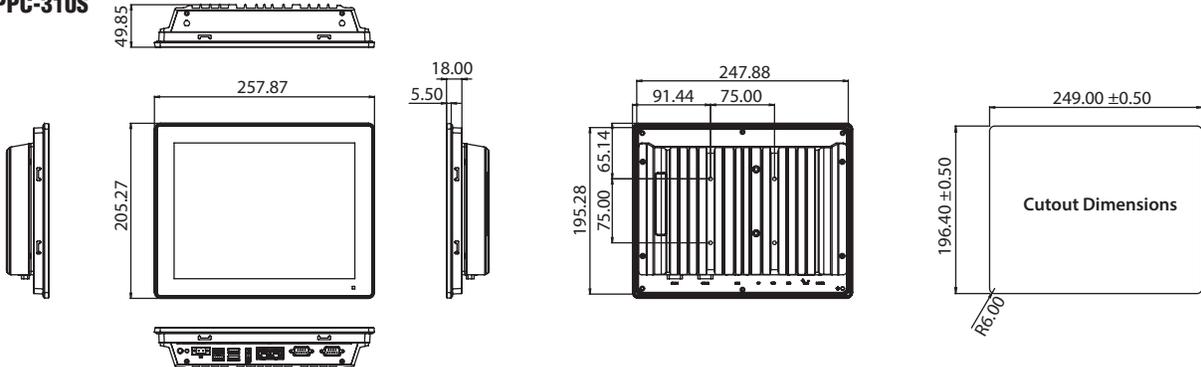
Specifications

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 (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 2242 or 3042/3052 (PCIe x1, USB 3.0 & SIM slot), support idoor & 4G, and 5G by request 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)	-30 ~ 85 °C (-22 ~ 185 °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	

Last updated: 12-Feb-2026

Dimensions

Unit: mm

PPC-310S

49.85

257.87

205.27

18.00

5.50

247.88

91.44 75.00

195.28 65.14 75.00

249.00 ±0.50

196.40 ±0.50

Cutout Dimensions

R6.00
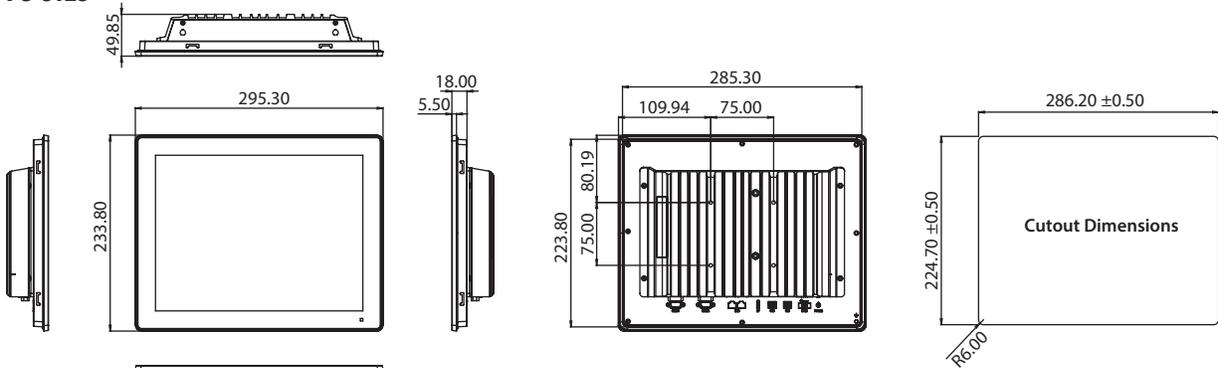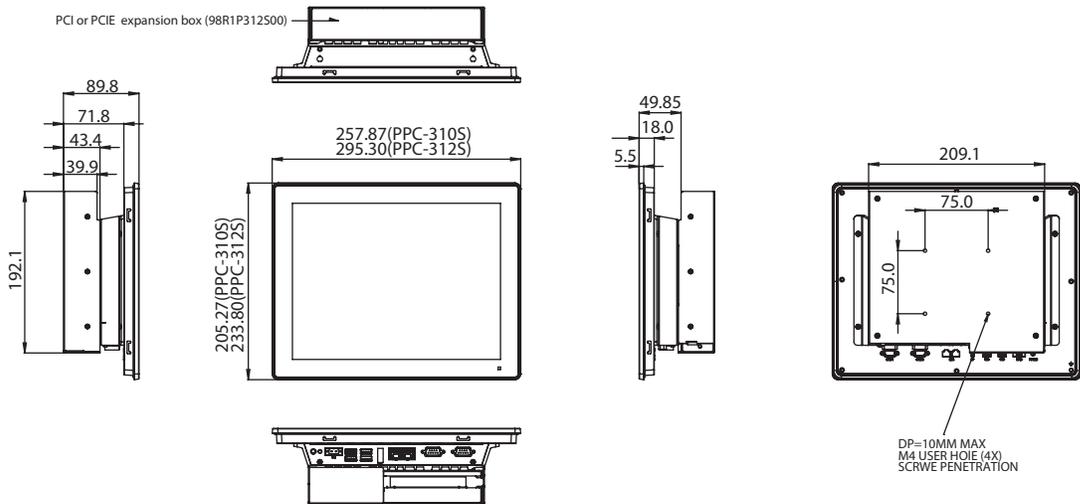
Panel Cutout Dimensions: 249 x 196.4 mm (9.81 x 7.74 in)

PPC-312S

49.85

295.30

233.80

18.00

5.50

285.30

109.94 75.00

223.80 80.19 75.00

286.20 ±0.50

224.70 ±0.50

Cutout Dimensions

R6.00

Panel Cutout Dimensions: 286.2 x 224.7 mm (11.27 x 8.85 in)
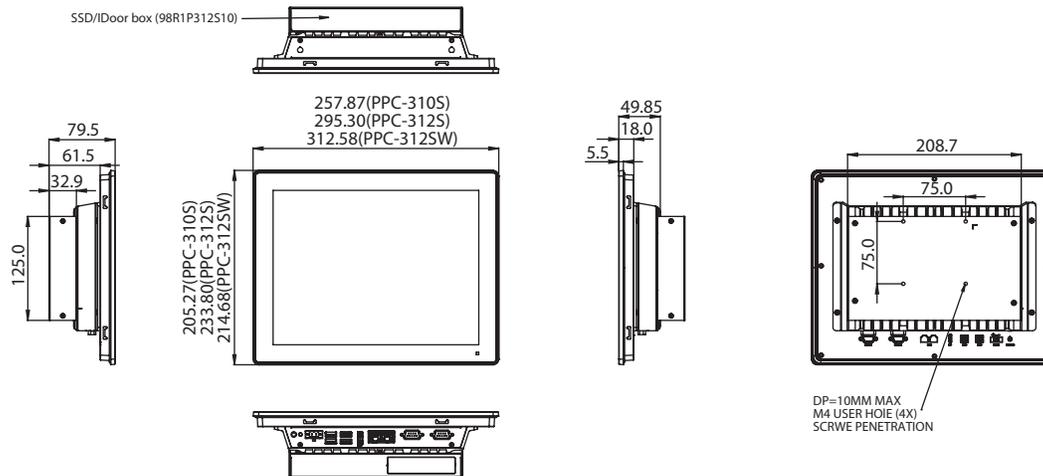
PPC-310S/312S with PCI or PCIe Expansion Box (98R1P312S00)

PCI or PCIE expansion box (98R1P312S00)

89.8
71.8
43.4
39.9

192.1

257.87(PPC-310S)
295.30(PPC-312S)

205.27(PPC-310S)
233.80(PPC-312S)

49.85
18.0
5.5

209.1

75.0
75.0

DP=10MM MAX
M4 USER HOIE (4X)
SCRWE PENETRATION

Dimensions

Unit: mm

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

SSD/IDoor box (98R1P312S10)

257.87(PPC-310S)
295.30(PPC-312S)
312.58(PPC-312SW)

79.5
61.5
32.9
125.0

205.27(PPC-310S)
233.80(PPC-312S)
214.68(PPC-312SW)

49.85
18.0
5.5

208.7
75.0
75.0

DP=10MM MAX
M4 USER HOIE (4X)
SCRWE PENETRATION

Ordering Information

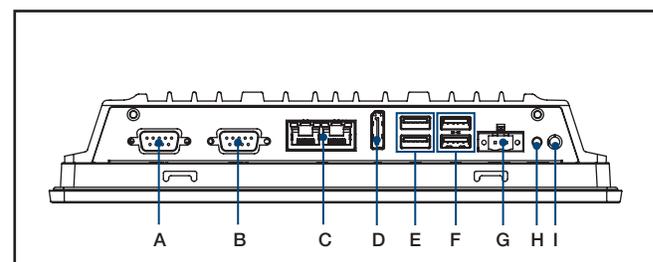| Part Number	Description
PPC-310S-RX7A	10.4" PPC w/Intel x7433RE, Res.
PPC-310S-PX7A	10.4" PPC w/Intel x7433RE, Pcap
PPC-312S-RX7A	12.1" PPC w/Intel x7433RE, Res.
PPC-312S-PX7A	12.1" PPC w/Intel x7433RE, Pcap
96PSA-A90W19OT-3	Power adapter 100-240V 90W 19V
1700001524	POWER Cord 3P UL 10A 125V 180cm
170203183C	POWER Cord 3P Europe (WS-010+083)183 cm
1700008921	POWER Cord 3P/3P POWER SUPPLY 1.8 M PSE
96CB-POWER-B-1.8MB	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 compatiable).
** 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	24 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
I. Pre cut hole for power button cable extend

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.