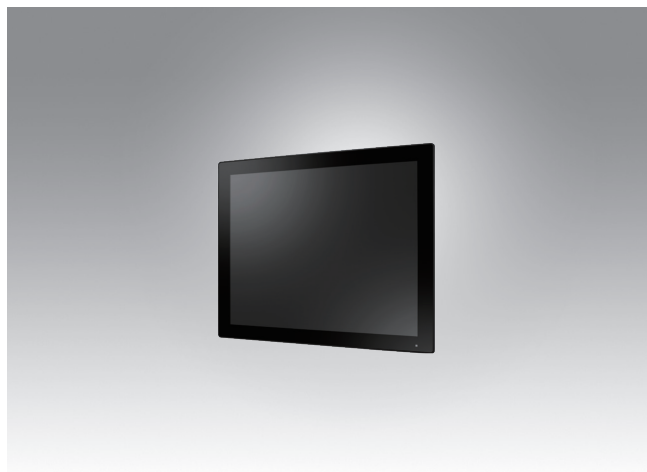


# PPC-312S(W) RPL

## 12.1" Fanless Panel PC with Intel® 13th Gen Core™ i7/i5/i3 Processor



### Features

- True-flat touchscreen with Industrial-grade LCD panel
- High-performance, fanless 13th generation Intel® Core™ i processor
- Slim Compact, fanless design with aluminum alloy enclosure
- IP66-rated front panel
- Supports dual displays (1 x external DP)
- 1 x M.2 M Key 2242/2280 (SATA or NVMe PCIe x 4) for storage, support SATA RAID 0,1
- 2 x 2500BASE-T Ethernet Supports Time-Sensitive Network(TSN) technology
- Supports VESA 75
- Support TPM2.0 hardware security
- Support iDoor
- Support PCI or PCIe



### Introduction

PPC-300S RPL equipped Intel 13th Gen Core i7/i5/i3, providing high computing performance with a slim & compact design and robust aluminum alloy enclosure. It also leverages M.2 M key NVMe PCIe to accommodate extremely high data rate and low latency advantage. PPC-300S RPL features 4 x USB, 2 x series ports and 1 x DP for flexible access and connection. The addition optional of PCIe/PCI slots or iDoor for fieldbus or proprietary card extensions increases the compatibility of the system for various applications. The PPC-300S RPL series is an excellent solution to enable quick data capture, processing and data digitalization in various industrial applications.

### Specifications

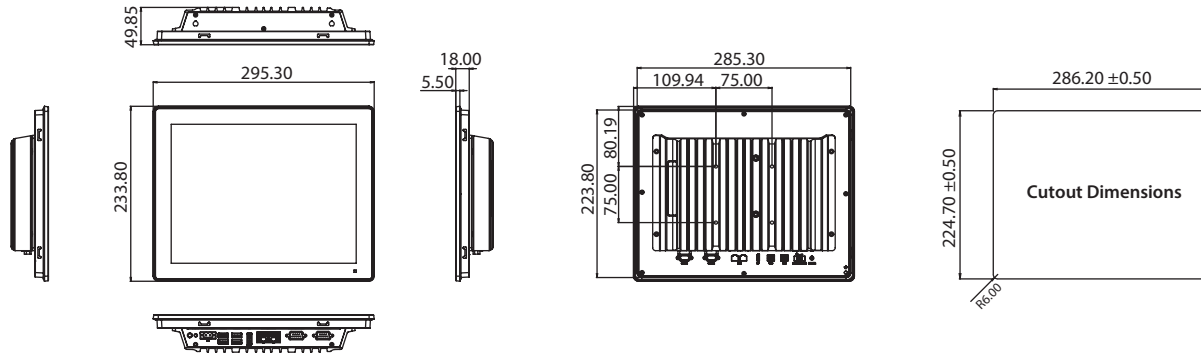
	CPU	i3-1315UE	i5-1335UE	i7-1365UE
System	Core	6	10	10
	Frequency	1.20 GHz upto 4.5GHz with Turbo	1.30 GHz upto 4.5GHz with Turbo	1.70 GHz upto 4.9GHz with Turbo
	Cache	10 MB	12 MB	12 MB
	Memory	1 x SODIMM, DDR5 4800MHz, max. 32GB		
	Storage	1 x 2.5" SATA bay (optional) 1 x M.2 M Key 2242/2280 (SATA or NVMe PCIe x 4), support SATA RAID 0,1		
	Network (LAN)	2 x 10/100/1000/2500 Mbps Ethernet (Intel I226 LM)		
	I/O	2 x RS-232/422/485 3 x USB3.2, 1 x USB2.0 2 x USB2.0 (optional) 1 x DP 1 x TPM 2.0		
	Expansion	1 x M.2 B key 2242 or 3042/3052 (SATA, PCIe X1 ,USB 3.0 & SIM slot)** 1 x M.2 E Key 2230 (PCIe & USB 2.0) 1 x iDoor (optional) 1 x PCI or PCIe x1 (optional)*		
	Watchdog Timer	255 timer levels; setup by software		
	Speaker	1 x 2W		

Model	PPC-312S	PPC-312SW	
LCD	Display Type	12.1" TFT LCD (LED backlight)	
	Aspect Ratio	4:3	16:10
	Max. Resolution	1024 x 768	1280 x 800
	Viewing Angle	89 (left), 89 (right), 89 (up), 89 (down)	89 (left), 89 (right), 89 (up), 89 (down)
	Luminance (cd/m²)	500	400
	Contrast Ratio	1000	1000
	Backlight Lifetime	30,000 hr (min.)	30,000 hr (min.)
Touchscreen	Touchscreen type	5 wire resistive touch	P-CAP
	Light Transmission	80±5%	>86%
	Controller	USB interface	
Physical Characteristics	Dimensions	295.3 x 233.8 x 49.9 mm (11.6 x 9.2 x 2.0 in)	312.6 x 214.7 x 49.9mm (12.3 x 8.5 x 2.0 in)
	Weight	2.79 kg(6.15 lb)	2.85 kg (6.28 lb)
OS Support	Windows 10 LTSC, Windows 11, Linux		
Power Consumption	Input Voltage	24V <sub>DC</sub> ± 30%	
	Power Consumption	70W	
Environment	Operating Temperature	-10 ~ 50 °C (32 ~ 122 °F)	
	Storage Temperature	-40 ~ 60 °C (-40 ~ 140 °F)	-20 ~ 70 °C (-4 ~ 158 °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**

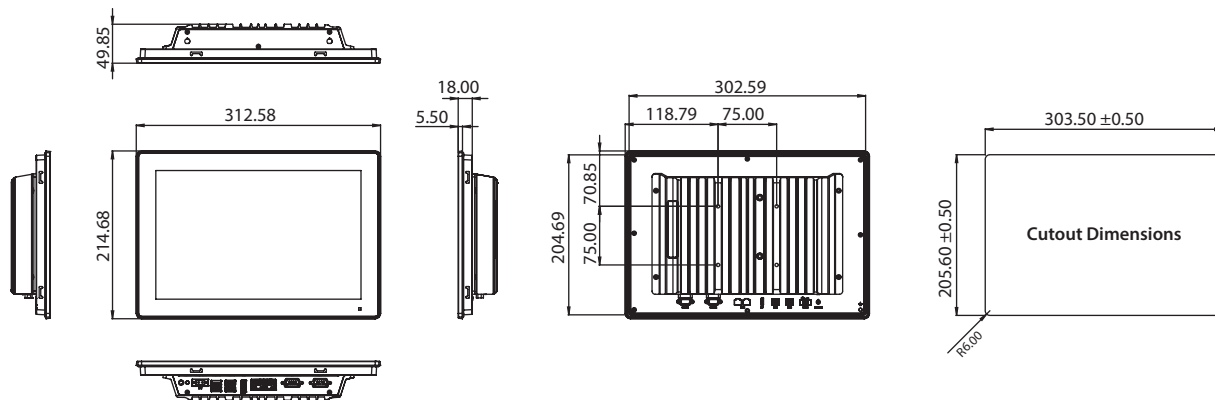
Unit: mm

**PPC-312S**



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

**PPC-312SW**



**Panel Cutout Dimensions: 303.5 x 205.6 mm (12.39 x 8.09 in)**

## Ordering Information

Part Number	Description
PPC-312S-RDI3A	12.1" PPC w/Intel i3-1315UE, Res.
PPC-312S-RDI5A	12.1" PPC w/Intel i5-1335UE, Res.
PPC-312S-RDI7A	12.1" PPC w/Intel i7-1365UE, Res.
PPC-312SW-PDI5A	12.1" PPC w/Intel i5-1335UE, P-Cap, wide screen
96PSA-A120W24T2-4	Power adapter 100-240V 120W 24V
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

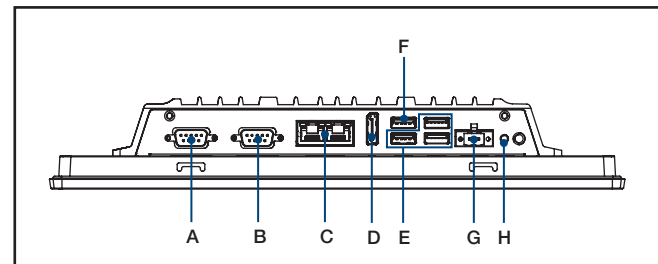
\* PCIe riser card supports PCIe x1 singal, but the slot is PCIe x4(PCle x1 compatible).

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

## 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. 3 x USB 3.2
- F. 1 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.