

# PPC-315SW RPL PPC-318SW RPL PPC-321SW RPL

## 15.6"/18.5"/21.5" 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-300SW 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-300SW 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-300SW RPL series is an excellent solution to enable quick data capture, processing and data digitalization in various industrial applications.

### Specifications

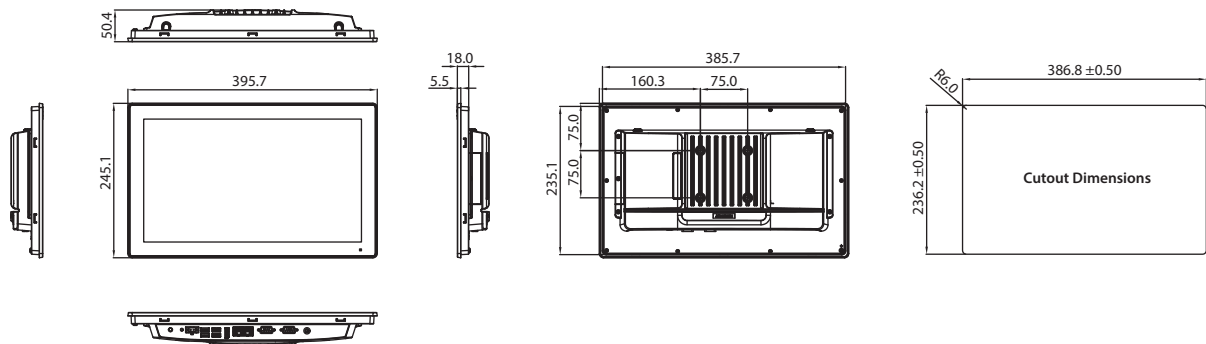
|        |                |                                                                                                                                                                           |                                 |                                 |
|--------|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|---------------------------------|
| System | CPU            | i3-1315UE                                                                                                                                                                 | i5-1335UE                       | i7-1365UE                       |
|        | 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*<br>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<br>3 x USB3.2.1 x USB2.0<br>2 x USB2.0 (optional)*<br>1 x DP<br>1 x line out<br>1 x TPM 2.0                                                            |                                 |                                 |
|        | Expansion      | 1 x M.2 B key 2242 or 3042/3052 (SATA, PCIe X1, USB 3.0 & SIM slot)***<br>1 x M.2 E Key 2230 (PCIe & USB 2.0)<br>1 x iDoor (optional)*<br>1 x PCI or PCIe x1 (optional)** |                                 |                                 |
|        | Watchdog Timer | 255 timer levels; setup by software                                                                                                                                       |                                 |                                 |
|        | Speaker        | 1 x 2W                                                                                                                                                                    |                                 |                                 |

|                          |                        |                                                                                  |                                                   |                                                   |
|--------------------------|------------------------|----------------------------------------------------------------------------------|---------------------------------------------------|---------------------------------------------------|
| LCD                      | Display Type           | 15.6" TFT LCD (LED backlight)                                                    | 18.5" TFT LCD (LED backlight)                     | 21.5" TFT LCD (LED backlight)                     |
|                          | Max. Resolution        | 1920 x 1080                                                                      | 1366 x 768                                        | 1920 x 1080                                       |
|                          | Viewing Angle          | 89 (left), 89 (right), 89 (up), 89 (down)                                        | 85 (left), 85 (right), 80 (up), 80 (down)         | 89 (left), 89 (right), 89 (up), 89 (down)         |
|                          | Luminance (cd/m²)      | 350                                                                              | 450                                               | 250                                               |
|                          | Contrast Ratio         | 800                                                                              | 1000                                              | 1000                                              |
|                          | Backlight Lifetime     | 50000hr (min.)                                                                   | 50,000hrs (min.)                                  | 50,000hrs (min.)                                  |
|                          | Touchscreen type       | 5 wire resistive touch or Multi-touch projected capacitive                       |                                                   |                                                   |
| Touchscreen              | Light Transmission     | 80%±3% (Res) or >86% (P-cap)                                                     |                                                   |                                                   |
|                          | Controller             | USB interface                                                                    |                                                   |                                                   |
| Physical Characteristics | Dimensions             | 395.7 x 245.1 x 50.4 mm<br>(15.6 x 9.7 x 2.0 in)                                 | 464.5 x 285.5 x 53.4 mm<br>(18.3 x 11.2 x 2.1 in) | 529.6 x 321.3 x 53.4 mm<br>(20.9 x 12.6 x 2.1 in) |
|                          | Weight                 | 4.3 kg                                                                           | 5.3 kg (11.53 lb)                                 | 6.35 kg (13.91 lb)                                |
| OS Support               | OS Support             | Windows 10 LTSC, Windows 11, Linux                                               |                                                   |                                                   |
| Power Consumption        | Input Voltage          | 24V <sub>DC</sub> ± 30%                                                          |                                                   |                                                   |
|                          | Power Consumption      | 85W                                                                              | 80W                                               | 70W                                               |
| Environment              | Operating Temperature  | -10 ~ 50 °C (32 ~ 122 °F)                                                        |                                                   |                                                   |
|                          | Storage Temperature    | -20 ~ 60 °C (-4 ~ 140 °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

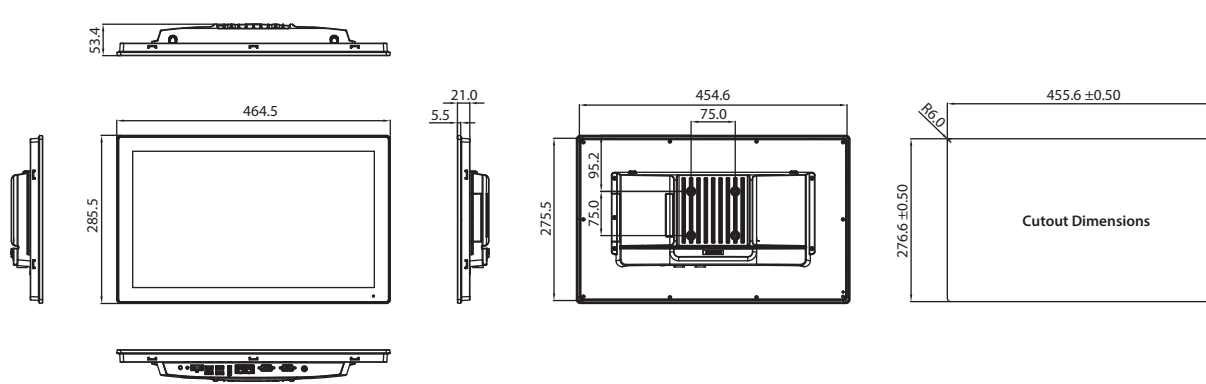
Unit: mm

PPC-315SW



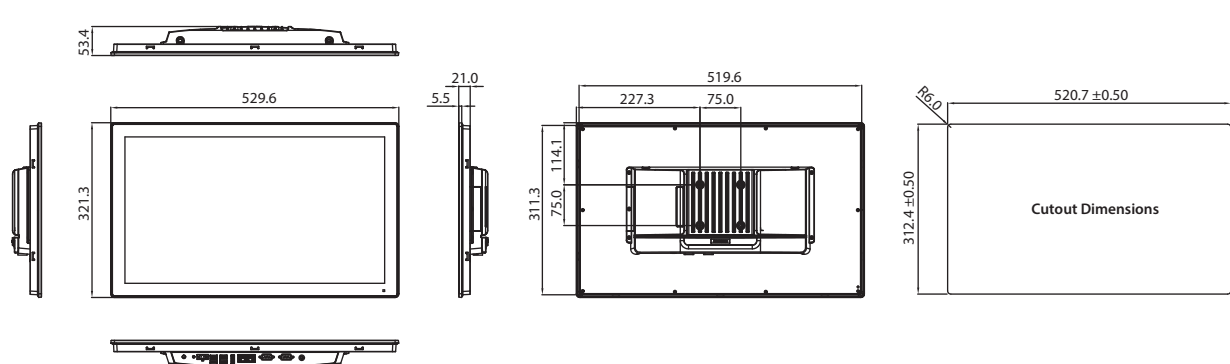
Panel Cutout Dimensions: 386.8 x 236.2 mm (15.23 x 9.30 in)

PPC-318SW



Panel Cutout Dimensions: 455.6 x 276.6 mm (17.94 x 10.89 in)

PC-321SW



Panel Cutout Dimensions: 520.7 x 312.4 mm (20.5 x 12.3 in)

## Ordering Information

| Part Number        | Description                                                            |
|--------------------|------------------------------------------------------------------------|
| PPC-315SW-PDI3A    | 15.6" PPC w/Intel i3-1315UE, P-Cap                                     |
| PPC-315SW-PDI5A    | 15.6" PPC w/Intel i5-1335UE, P-Cap                                     |
| PPC-315SW-PDI7A    | 15.6" PPC w/Intel i7-1365UE, P-Cap                                     |
| PPC-315SW-RDI5A    | 15.6" PPC w/Intel i5-1335UE, Res.                                      |
| PPC-318SW-PDI3A    | 18.5" PPC w/Intel i3-1315UE, P-Cap                                     |
| PPC-318SW-PDI5A    | 18.5" PPC w/Intel i5-1335UE, P-Cap                                     |
| PPC-318SW-PDI7A    | 18.5" PPC w/Intel i7-1365UE, P-Cap                                     |
| PPC-318SW-RDI5A    | 18.5" PPC w/Intel i5-1335UE, Res.                                      |
| PPC-321SW-PDI3A    | 21.5" PPC w/Intel i3-1315UE, P-Cap                                     |
| PPC-321SW-PDI5A    | 21.5" PPC w/Intel i5-1335UE, P-Cap                                     |
| PPC-321SW-PDI7A    | 21.5" PPC w/Intel i7-1365UE, P-Cap                                     |
| PPC-321SW-RDI5A    | 21.5" PPC w/Intel i5-1335UE, Res.                                      |
| 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                                  |
| 98R1P300S00        | Add-on box for PCI or PCIe expansion (include PCI / PCIe riser card)** |
| 98R1P300S10        | Additional ports module (2 x USB 2.0)*                                 |

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

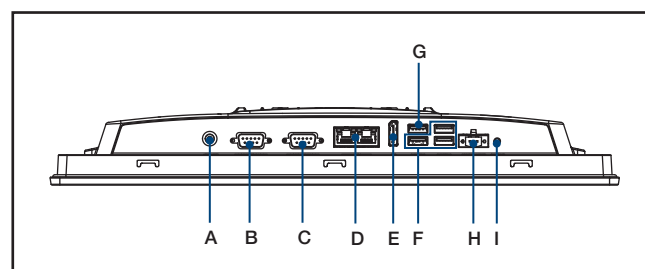
\*\* PCIe riser card supports PCIe x1 singal, but the slot is PCIe x4(PCle x1 compatible).

\*\*\* 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. Line out
- B. COM1: RS-232/422/485
- C. COM2: RS-232/422/485
- D. 2 x LAN
- E. DP
- F. 3 x USB 3.2
- G. 1 x USB 2.0
- H. DC-In
- I. Power Button