



## Features

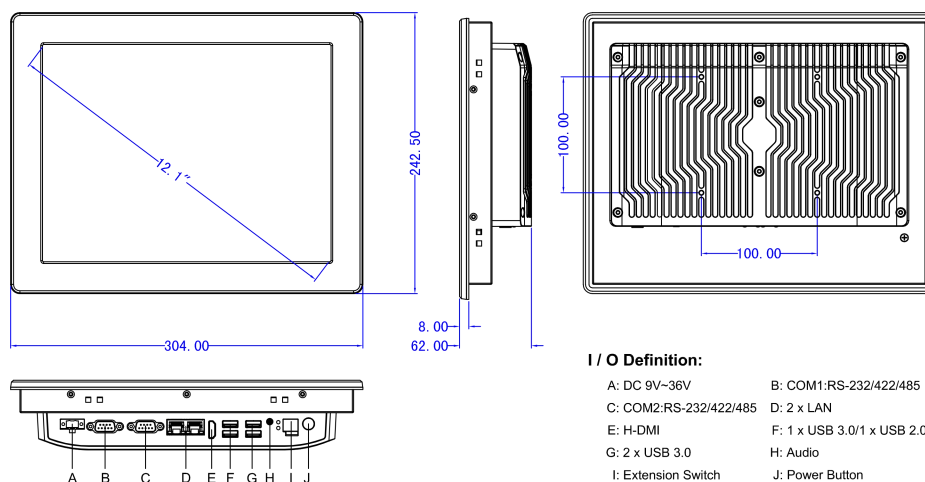
- Industrial-grade 12" XGA LCD panel with 50k backlight lifetime
- High precision 5-wires resistive touch, EETI controller
- IP65 grade aluminum alloy front panel
- 8th / 10th Gen Intel® Whiskey Lake Core™ i3 / i5 / i7 Processor
- 2 x DDR4 SDRAM, max.64GB, 1 x M.2 2280 / 1 x mSATA SSD
- 2 x Intel® 211 1GbE Ethernet, support WoL and PXE
- 2 x RS232/422/485, RS485 support automatic flow control
- Support TPM2.0 hardware security
- Supports embedded / VESA 100mm x 100mm mounting holes
- 9V to 36V DC Wide Range Power Input, Supporting OVP / OCP / RPP

## Specifications

| System             |                                                         |                                 |                               |
|--------------------|---------------------------------------------------------|---------------------------------|-------------------------------|
| CPU                | 8th Gen Intel® Core™ i3-8145U                           | 10th Gen Intel® Core™ i5-10210U | 8th Gen Intel® Core™ i7-8565U |
| L3 Cache           | 4MB                                                     | 6MB                             | 8MB                           |
| TDP                | 25W                                                     | 25W                             | 25W                           |
| System Chipset     | Integrated with Intel® SoC                              |                                 |                               |
| Memory             | 2 x DDR4L 2400MHz 4GB, Up to 64GB                       |                                 |                               |
| Harddisk           | 1 x M.2 120G SSD ( 250G / 500G / 2TB SSD) / 1 x mSATA   |                                 |                               |
| Graphics           | Intel HD Graphics 620                                   |                                 |                               |
| Network            | Intel® I211-AT GbE LAN                                  |                                 |                               |
| Audio              | Realtek ACL897 Audio controller                         |                                 |                               |
| TPM                | TPM 2.0                                                 |                                 |                               |
| Watchdog Timer     | Software Programmable Supports 1~255 sec. System Reset  |                                 |                               |
| Operation System   | Windows 10 / 11, Linux, Ubuntu                          |                                 |                               |
| I / O              |                                                         |                                 |                               |
| VIDEO              | 1 x H-DMI                                               |                                 |                               |
| Ethernet           | 2 x LAN (10/100/1000 Mbps)                              |                                 |                               |
| USB                | 3 x USB 3.0 / 1 x USB 2.0                               |                                 |                               |
| COM                | 2 x RS-232 / 422 / 485 ( Adjustable through BIOS )      |                                 |                               |
| Audio              | 1x Audio_out & Mic_in                                   |                                 |                               |
| Wireless Network   | Optional (WiFi / Bluetooth / 4G / 5G )                  |                                 |                               |
| Expansion          |                                                         |                                 |                               |
| M.2                | 1*M.2 ( Key-E, 2230, PCIe+USB, Wifi+BT )                |                                 |                               |
|                    | 1*M.2 ( Key-B, 3042/3052, PCIe/ USB 3.0+USB2.0, 4G/5G ) |                                 |                               |
| SIM Socket         | 1x SIM Socket                                           |                                 |                               |
| Display            |                                                         |                                 |                               |
| LCD Size           | 12.1" ( 4:3 )                                           |                                 |                               |
| Resolution         | 1024 x 768                                              |                                 |                               |
| Brightness (cd/m²) | 500                                                     |                                 |                               |
| Contrast Ratio     | 1200:1                                                  |                                 |                               |
| Backlight MTBF     | 50000 Hr(min.)                                          |                                 |                               |
| Viewing Angle      | 88 / 88 / 88 / 88 (CR≥10) ( L / R / U / D )             |                                 |                               |
| Touch screen       |                                                         |                                 |                               |
| Touch Type         | 5 Wire Resistive touch                                  |                                 |                               |
| Surface Hardness   | ≥3H                                                     |                                 |                               |

| Power                 |                                                                                                   |
|-----------------------|---------------------------------------------------------------------------------------------------|
| Power Adapter         | 1 x Optional AC/DC 12V/5A , 60W                                                                   |
| Power Mode            | Support AT, ATX Mode                                                                              |
| Power Input           | 2-pin Terminal Block Connector with Power Input 9~36VDC                                           |
| Power Protection      | OVP (Over Voltage Protection)   OCP (Over Current Protection)   RPP (Reverse Polarity Protectio ) |
| Power Consumption     | ≤45W                                                                                              |
| Physical              |                                                                                                   |
| Material              | Aluminum alloy panel, anodized treatment                                                          |
| Mounting              | Stand / Wall / VESA / Panel                                                                       |
| Dimension (W x H x D) | 304 x 243 x 62 mm                                                                                 |
| Cut-out Size          | 290 x 229 mm                                                                                      |
| Packing Size          | 450 x 170 x 350 mm                                                                                |
| Weight (Net)          | 2.6 KG                                                                                            |
| Environment           |                                                                                                   |
| Operating Temperature | -20~70°C ( -4~158°F )                                                                             |
| Storage Temperature   | -30~80°C (-22~176°F)                                                                              |
| Relative Humidity     | 5%~95%@40°C, non-condensing                                                                       |
| Vibration Protection  | 1.5 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 hr/axis                                           |
| IP Level              | Front Panel IP65                                                                                  |
| EMC                   | CE, FCC, KC , Class A, ROHS , IEC / EN 62368-1                                                    |

## Dimension & I/O



Panel Cutout Dimensions: 290 x 229 mm (11.42 x 9.0 in )

## Ordering info

| Available models | Description                                                                                                        |
|------------------|--------------------------------------------------------------------------------------------------------------------|
| PPC-3012SAR      | 12.1" Fanless Industrial Panel PC 8th Gen Intel® Whiskey Lake Core™ i3-8145U 2.1GHz Processor With Resistive touch |
| PPC-5012SAR      | 12.1" Fanless Industrial Panel PC 10th Gen Intel® Comet Lake Core™ i5-10210U 1.6GHz Processor With Resistive touch |
| PPC-7012SAR      | 12.1" Fanless Industrial Panel PC 8th Gen Intel® Whiskey Lake Core™ i7-8565U 1.8GHz Processor With Resistive touch |

## Packing list

|                             |
|-----------------------------|
| 1 x Standard product        |
| 1 x 60W PSU (Power Supply)  |
| 1 x Power cable & plug      |
| 8 x Panel mount metal clips |