# **PPC-3120S**

#### 12.1" Fanless Panel PC with Intel® Celeron® N2930 Processor



#### **Features**

- Industrial-grade 12.1" XGA TFT LCD with 30K backlight lifetime
- Durable true-flat touchscreen with 5-wire resistive touch control
- Intel<sup>®</sup> Celeron<sup>®</sup> N2930 quad-core, 1.83 GHz, processor
- Up to 8 GB DDR3L SDRAM
- 1 x RS-232, 1 x RS-232/422/485, 2 x USB 2.0, and 1 x USB 3.0
- Compact, fanless design with solid aluminum alloy enclosure and IP66-rated
- Supports E-Eye monitoring and protection
- Supports expansion via full-size mini PCle
- Supports Windows Embedded and Android OS
- Supports VESA 75 x 75 mounting holes









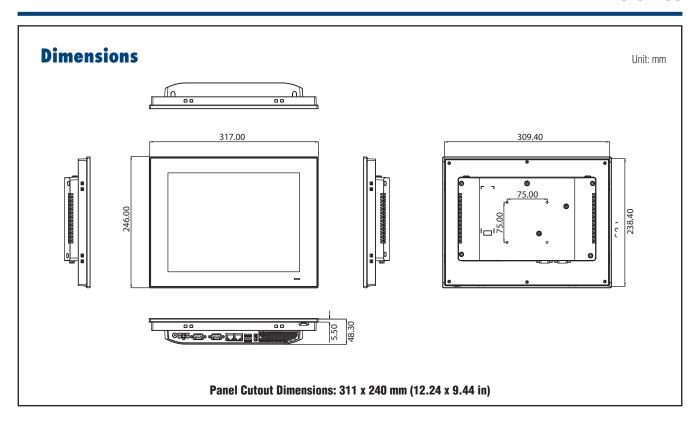


#### **Introduction**

The PPC-3120S is a high-value, ultra-slim panel PC equipped with a 12.1" XGA TFT LCD, and low-power Intel® Celeron® N2930, 1.83 GHz, processor to provide high-performance computing in a compact and fanless system. For high durability and functionality, the PPC-3120S features an IP66-rated front panel, true-flat 5-wire resistive touchscreen, two serial ports, three USB ports, and two GbE LAN ports, making it suitable for diverse industrial applications. To provide further system monitoring and protection capabilities, e-Eye technology is provided at the rear of the panel PC for indicating the system operating status to facilitate detection and analysis.

### **Specifications**

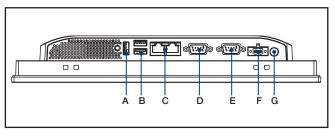
| System            | CPU                    | Intel® Celeron® N2930 quad core   |
|-------------------|------------------------|---|
|                   | Frequency              | 1.83 GHz  |
|                   | L2 Cache               | 2 MB  |
|                   | Memory                 | 1 x SODIMM DDR3L 1333 MHz (max. 8 GB)   |
|                   | Storage                | 1 x 2.5" SATA bay (optional; requires a bracket module for installation) 1 x mSATA bay (default)      |
|                   | Network (LAN)          | 2 x 10/100/1000 Mbps Ethernet (Realtek 8119i)   |
|                   | 1/0                    | 2 x Serial ports: 1 x RS-232, 1x RS-232/422/485 (Adjustable through BIOS)<br>2 x USB 2.0, 1 x USB 3.0 |
|                   | Expansion              | 1 x Full-size mini PCle slot  |
|                   | Watchdog Timer         | 255 timer levels, set up by software  |
| Physical          | Dimensions             | 317 x 246 x 49 mm (12.5 x 9.7 x 1.9 in)   |
| Characteristics   | Weight                 | 2.1 kg (4.63 lb)  |
| OS Support        | OS Support             | Microsoft® Windows 7(32/64-bit), Windows 10 IOT LTSC(64-bit), Linux                                   |
| Power Consumption | Input Voltage          | 12 ~ 24 V <sub>DC</sub>   |
|                   | Power Consumption      | 18W (Burn-in test 7.0 in Windows 7, 32-bit)   |
| LCD               | Display Type           | 12.1" TFT LCD (LED backlight)   |
|                   | Resolution             | 1024 x 768  |
|                   | Viewing Angle          | 80 (left), 80 (right), 70 (up), 70 (down)   |
|                   | Luminance (cd/m²)      | 500   |
|                   | Contrast Ratio         | 700   |
|                   | Backlight Lifetime     | 30,000 hr (min.)  |
| Touchscreen       | Touch Type             | ELO 5-wire resistive touch  |
|                   | Light Transmission     | 80±5% at 550 nm wavelength  |
|                   | Controller             | RS232 interface   |
|                   | Durability (Touches)   | Greater than 35 million touches in one location without failure                                       |
| Environment       | Operating Temperature  | 0 ~ 50 °C (32 ~ 122 °F)   |
|                   | Storage Temperature    | -40 ~ 60 °C (-40 ~ 140 °F)  |
|                   | Relative Humidity      | 95% @ 40 °C (non-condensing)  |
|                   | Shock                  | Operating 10 G peak acceleration (11 ms duration), follow IEC 60068-2-27                              |
|                   | Vibration              | Operating Random Vibration Test 5 ~ 500Hz, 2Grms @with SSD, follow IEC 60068-2-64                     |
|                   | EMC                    | CE, FCC Class B, BSMI, UKCA   |
|                   | Safety                 | CB, UL, CCC, UKCA   |
|                   | Front Panel Protection | IP66 compliant  |



## **Ordering Information**

| Part Number        | Description   |
|--------------------|---|
| PPC-3120S-RB       | 12.1" PPC w/Intel N2930, Resistive                    |
| PPC-3100S-HDDE     | Bracket module for 2.5" SSD/HDD installation          |
| 96PSA-A90W190T-3   | Power adapter 100-240V 90W 19V                        |
| PPC-WLAN-D1        | M.2, WiFi6 +BT5.2, 2T2R, w/Antenna, Mini PCle adapter |
| PPC-ARM-A03        | ARM VESA Standard for PPC series                      |
| PPC-174T-WL-MTE    | Wall mount kit for PPC series                         |
| PPC-Stand-A1E      | Stand for PPC series                                  |
| 1700001524         | Power cord 3P UL 10A 125V 1.8M                        |
| 170203183C         | Power cord 3P Europe (WS-010+083) 183cm               |
| 1700008921         | Power cord 3P/3P 1.8M PSE                             |
| 96CB-POWER-B-1.8MB | Power code 3P CCC(China) 1.8M                         |
| 98R3P300010        | PPC-300 RFID Read only 13.56MHz&125k                  |

#### I/O View



A. USB 2.0

B. 1 x USB 2.0, 1 x USB 3.0

C. 2 x RJ45 LAN

D. RS-232/422/485

E. RS-232

F. DC-In

G. Power Switch

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.