

# PPC-3100S

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



### Features

- Industrial-grade 10.4" SVGA/XGA TFT LCD with 30K backlight lifetime
- Durable true-flat touchscreen with 5-wire resistive/projected capacitive touch control
- Intel® Celeron® 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 IP65-rated front panel
- Supports E-Eye monitoring and protection
- Supports expansion via full-size mini PCIe
- Supports Windows Embedded and Android OS
- Supports VESA 75 x 75 mounting holes

### Introduction

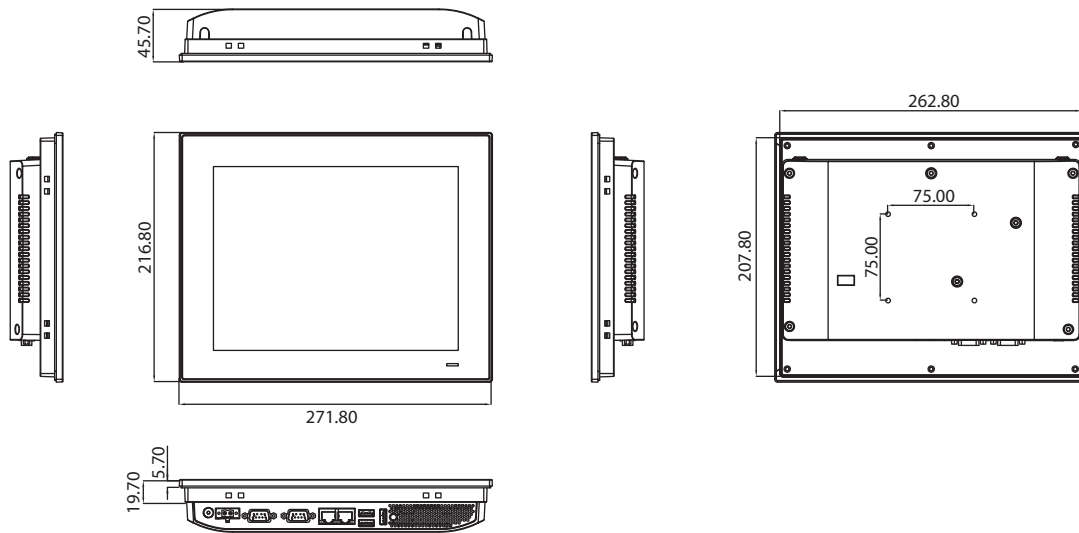
The PPC-3100S is a high-value, ultra-slim panel PC equipped with a 10.4" SVGA/XGA TFT LCD, and low-power Intel® Celeron® N2930, 1.83 GHz, processor to provide high-performance computing in a compact and fanless system. For high durability and functionality, the PPC-3100S features an IP65-rated front panel, true-flat touchscreen with 5-wire resistive/projected capacitive touch, 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

|                                 |                                | PPC-3100S-RAE   | PPC-3100S-PBE                             |
|---------------------------------|--------------------------------|---|---|
| <b>System</b>                   | 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 bay (optional; requires a bracket module for installation)<br>1 x mSATA Bay (default)   |   |
|                                 | Network (LAN)                  | 2 x 10/100/1000 Mbps Ethernet (Intel I211-AT)   |   |
|                                 | I/O                            | 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 (for PPC-3100S-RAE)<br>1 x USB 2.0, 1 x USB 3.0 (for PPC-3100S-PBE) |   |
|                                 | Expansion                      | 1 x Full-size mini PCIe slot  |   |
|                                 | Watchdog Timer                 | 255 timer levels, set up by software  |   |
| <b>Physical Characteristics</b> | Dimensions                     | 272 x 217 x 46 mm (10.7 x 8.5 x 1.8 in)   |   |
|                                 | Weight                         | 1.9 kg (4.18 lb)  |   |
| <b>OS Support</b>               | OS Support                     | Microsoft® Windows 7(32/64-bit)/10(64-bit), WES7P, WEC7, Windows 10 IOT LTSC, Linux, Android 6.0  |   |
| <b>Power Consumption</b>        | Input Voltage                  | 12 ~ 24 V <sub>DC</sub>   |   |
|                                 | Power Consumption              | 16W (Burn-in test 7.0 in Windows 7, 32-bit)   |   |
| <b>LCD</b>                      | Display Type                   | 10.4" TFT LCD (LED backlight)   | 10.4" TFT LCD (LED backlight)             |
|                                 | Resolution                     | 800 x 600   | 1024 x 768                                |
|                                 | Viewing Angle                  | 80 (left), 80 (right), 70 (up), 70 (down)   | 88 (left), 88 (right), 88 (up), 88 (down) |
|                                 | Luminance (cd/m <sup>2</sup> ) | 400   | 350                                       |
|                                 | Contrast Ratio                 | 700   | 1200                                      |
|                                 | Backlight Lifetime             | 30,000 hr (min.)  | 30,000 hr (min.)                          |
|                                 | <b>Touchscreen</b>             | Touch Type  | ELO 5-wire resistive                      |
| Light Transmission              |                                | 80±5% at 550nm wavelength   | 88±2%                                     |
| Controller                      |                                | RS232 interface   | USB interface                             |
| Durability/Surface Hardness     |                                | Greater than 35million touches in one location without failure  | Cover glass > 7H                          |
| <b>Environment</b>              | Operating Temperature          | 0 ~ 50 °C (32 ~ 122 °F) with SSD<br>0 ~ 40 °C (32 ~ 104 °F) with HDD (with the HDD temperature more than or equal to 65 °C)   |   |
|                                 | Storage Temperature            | -40 ~ 60 °C (-40 ~ 140 °F)  |   |
|                                 | Relative Humidity              | 10 ~ 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, 1Grms @with HDD; 2Grms @with SSD, follow IEC 60068-2-64  |   |
|                                 | EMC                            | CE, FCC Class B, BSMI   |   |
|                                 | Safety                         | CB, CCC, BSMI, UL   |   |
|                                 | Front Panel Protection         | IP65 compliant  |   |

## Dimensions

Unit: mm

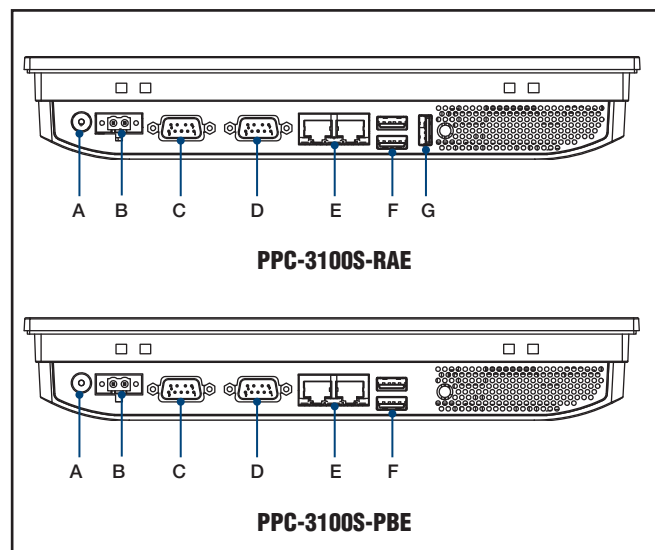


**Panel Cutout Dimensions: 265 x 210 mm (10.43 x 8.26 in)**

## Ordering Information

| Part Number        | Description   |
|--------------------|---|
| PPC-3100S-RAE      | Intel Celeron N2930 Fanless Panel PC with 10.4" SVGA LED backlight, Resistive 5 wire touch screen, assembled in China           |
| PPC-3100S-RAU      | Intel Celeron N2930 Fanless Panel PC with 10.4" SVGA LED backlight, Resistive 5 wire touch screen, assembled in Taiwan          |
| PPC-3100S-PBE      | Intel Celeron N2930 Fanless Panel PC with 10.4" XGA LED backlight, Projected Capacitive Multi-touch screen, assembled in China  |
| PPC-3100S-PBU      | Intel Celeron N2930 Fanless Panel PC with 10.4" XGA LED backlight, Projected Capacitive Multi-touch screen, assembled in Taiwan |
| PPC-3100S-HDDE     | Bracket module for 2.5" SSD/HDD installation  |
| 96PSA-A90W190T-3   | A/D 100-240V 90W 19V C6 TERMINAL 2 PIN 62368  |
| PPC-WLAN-C1E       | M.2 Wi-Fi Module with Antenna cable support 2T2R  |
| PPC-ARM-A03        | ARM VESA Standard (A-CLEVER) 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   |

## I/O View



- A. Power Switch
- B. DC-In
- C. RS-232
- D. RS-232/422/485
- E. 2 x RJ45 LAN
- F. 1 x USB 2.0, 1 x USB 3.0
- G. USB 2.0

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.