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® 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 IP66-rated front panel
- Supports E-Eye monitoring and protection
- Supports expansion via full-size mini PCIe
- Supports Windows Embedded and Android OS
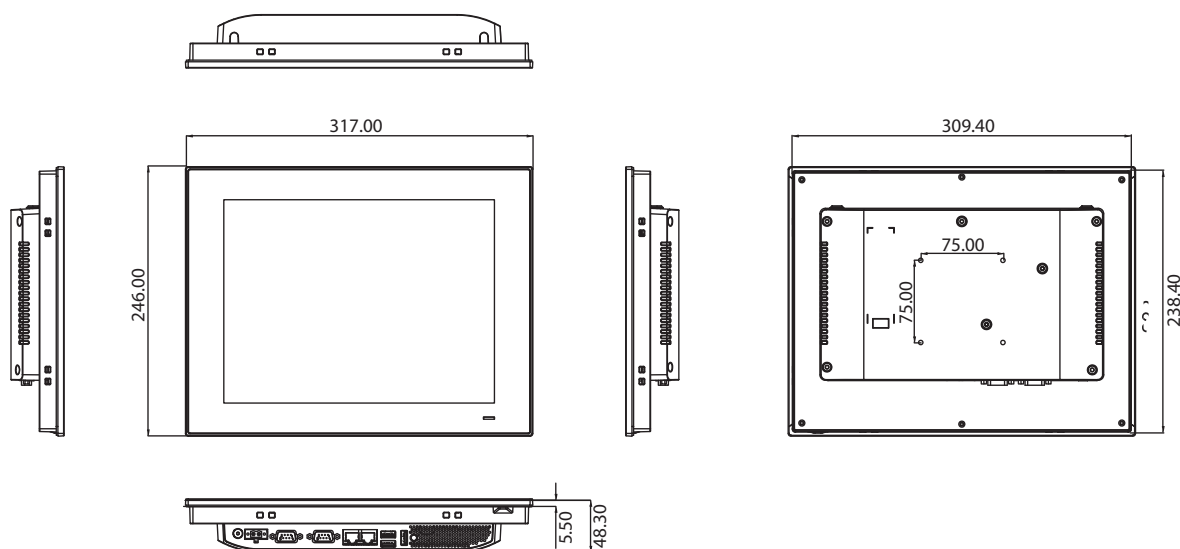- Supports VESA 75 x 75 mounting holes

Introduction

The PPC-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 (Intel I211-AT/I210AT A ver. or Realtek 8119i B ver.)
	I/O	2 x Serial ports: 1 x RS-232, 1x RS-232/422/485 (Adjustable through BIOS) 2 x USB 2.0, 1 x USB 3.0
	Expansion	1 x Full-size mini PCIe slot
	Watchdog Timer	255 timer levels, set up by software
Physical Characteristics	Dimensions	317 x 246 x 49 mm (12.5 x 9.7 x 1.9 in)
	Weight	2.1 kg (4.63 lb)
OS Support	OS Support	Microsoft® Windows 7(32/64-bit)/10(64-bit), WES7P, WEC7, Windows 10 IOT LTSC, Linux, Android 6.0
Power Consumption	Input Voltage	12 ~ 24 V_{DC}
	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) with SSD 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	IP66 compliant

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Dimensions

317.00

246.00

309.40

75.00

75.00

238.40

5.50

48.30

Panel Cutout Dimensions: 311 x 240 mm (12.24 x 9.44 in)

Ordering Information

Part Number	Description
PPC-3120S-RAE	Intel Celeron N2930 Fanless PPC with 12.1" LED panel, Res. T/S, assembled in China
PPC-3120S-RB	Intel Celeron N2930 Fanless PPC with 12.1" LED panel, Res. T/S, assembled in China
PPC-3120S-RAU	Intel Celeron N2930 Fanless PPC with 12.1" LED panel, Res. T/S, assembled in Taiwan
PPC-3120S-RBU	Intel Celeron N2930 Fanless PPC with 12.1" LED panel, Res. T/S, assembled in Taiwan
PPC-3100S-HDDE	Bracket module for 2.5" SSD/HDD installation
96PSA-A90W19OT-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

Note:
PPC-3120S-xAx:Intel I211-AT/I210AT, 1GbE LAN chipset
PPC-3120S-xBx:Realtek 8119i, 1GbE LAN chipset

I/O View

A   B   C   D   E   F   G
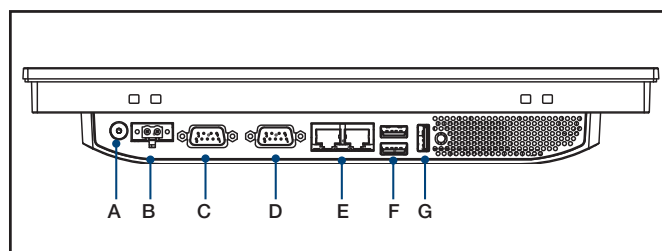
A. Power Switch
B. DC-In
C. RS-232
D. RS-232/422/485

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.