

# PPC-412

## 12.1" Fanless Panel PC with Intel® Core™ i5-7300U Processor



### Features

- 12.1" XGA TFT LCD with resistive touchscreen
- Intel® Core™ i5-7300U(default); i7-7600U/i3-7100U(optional) processor with fanless system design
- 1 x isolated RS-422/485 with auto flow
- Wide input power range (9 ~ 32 V<sub>DC</sub>)
- Dual Gigabit Ethernet with IEEE1588 support
- 3 x Independent displays
- 1 x M.2 B key bay (2242) for storage and support SATA RAID 0/1
- 1 x TPM 2.0 internal support (optional)
- Supports VESA 75 mounting interface



### Introduction

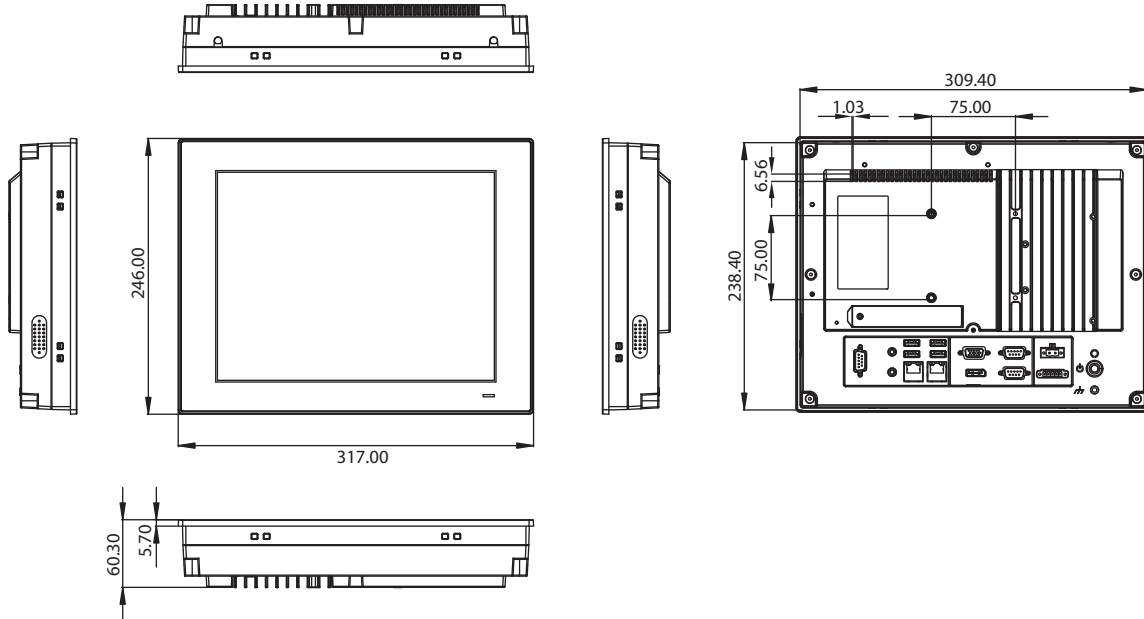
PPC-412 is a new generation industrial interactive panel PC with a 12.1" TFT LCD 1024 x 768 resolution, which features a flat, sleek design to greatly reduce maintenance effort. Pre-installed Intel® Core™ i processor and designed fanless architecture, PPC-412 provide high performance and reliable system for factory automation or variety of industrial applications. Furthermore, with the provision of multiple I/O, dual Intel® Gigabit ethernet, PPC-412 ensures easy integration and connectivity.

### Specifications

<b>System</b>	CPU	Intel® Core™ i5-7300U dual core (default); i7-7600U/i3-7100U (optional)
	Frequency	2.6 GHz, up to 3.5 GHz with turbo
	L2 Cache	3 MB
	Memory	1 x SODIMM DDR4 1866/2133 MHz, (max. 16 GB)
	Storage	1 x 2.5" SATA bay 1 x M.2 2242 B Key slot for Storage(SATA or NVME interface),support SATA RAID 0/1
	Network (LAN)	2 x 10/100/1000 Mbps Ethernet (Intel I219LM; Intel I210AT)
	I/O	3 x RS-232, 1 x RS-422/485 with 1K V <sub>DC</sub> isolation 4 x USB 3.0 1 x Line-out, 1 x Mic-in 1 x DB15 VGA 1 x Display Port (1.2) 1 x TPM 2.0 internal(optional)
	Expansion	1 x Mini PCIe
	Watchdog Timer	255 timer levels, set up by software
	Speaker	2 x 1W
<b>Physical Characteristics</b>	Dimensions	317 x 246 x 60.5 mm (12.4 x 9.7 x 2.4 in)
	Weight	3.4 kg (7.5 lb)
<b>OS Support</b>	OS Support	Microsoft® Windows 10 IOT LTSC(64-Bit), Linux
<b>Power Consumption</b>	Input Voltage	9 ~ 32 V <sub>DC</sub>
	Power Consumption	i5-7300U 60W (Burn-in test 8.0 in Windows 10 64bit)
<b>LCD</b>	Display Type	12.1" TFT LCD panel
	Max. Resolution	1024 x 768
	Viewing Angle	89 (left), 89 (right), 89 (up), 89 (down)
	Luminance (cd/m <sup>2</sup> )	600
	Contrast Ratio	1000
	Backlight Lifetime	50,000 hr (min.)
<b>Touchscreen</b>	Touch Type	5-wire resistive
	Light Transmission	80±5% at 550nm wavelength
	Controller	USB interface
<b>Environment</b>	Operating Temperature	0 ~ 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, EN 61000-6-2,BSMI, UKCA
	Safety	CB, UL, CCC, UKCA
Front Panel Protection	IP66 compliant	

**Dimensions**

Unit: mm

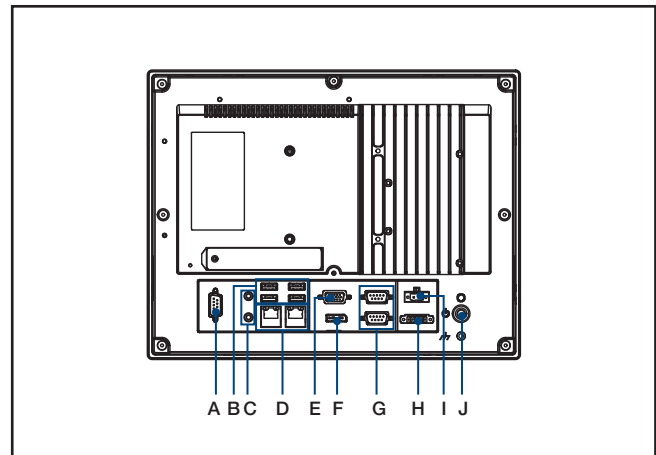


**Cut-Out Dimension: 311 x 240 mm**

**Ordering Information**

Part Number	Description
PPC-412-R750A	12.1" PPC w/Intel i5-7300U, Res.
96PSA-A90W190T-3	Power adapter 100-240V 90W 19V
1700001524	POWER Cord 3P UL 10A 125V 180cm
170203183C	POWER Code 3P Europe (WS-010+083)183cm
1700008921	POWER CORD 3P/3P POWER SUPPLY 1.8M PSE
96CB-POWER-B-1.8MB	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-D1	M.2, WiFi6 +BT5.2, 2T2R, w/Antenna, Mini PCIe adapter
98R3P321110	TPM 2.0 module for PPC-412/3151/3151W/3211W

**I/O View**



- A. 1 x RS-232
- B. 4 x USB3.0
- C. 1 x Mic-In/Line-Out
- D. 2 x Intel Gigabit Ethernet
- E. 1 x VGA
- F. 1 x DisplayPort
- G. 2 x RS-232
- H. 1 x Isolated RS-422/485
- I. 1 x DC inlet and AT/ATX switch
- J. 1 x Power button

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.