

PPC-415 EHL

15" Fanless Panel PC with Intel® Atom™ x6425E Processor



Features

- 15" XGA TFT LCD with resistive (default) or projected capacitive (by request) touchscreen
- Intel® Atom™ x6425E quad-core, 2.0 GHz processor
- Fanless, slim design
- Supports 1 x 2.5" SATA and 1 x M.2 B key slot for expansion
- 1 x PCI/PCIe x1 expansion slot
- Wide operating temperature range (-20 ~ 60 °C/-4 ~ 140 °F)
- Wide range DC support (9 ~ 32 V_{DC})
- 1 x isolated RS-422/485 with automatic flow control
- Dual 2.5GBASE-T Ethernet supports Time-Sensitive Network (TSN) technology
- Optional GPIO (8 channels, TTL level)



Introduction

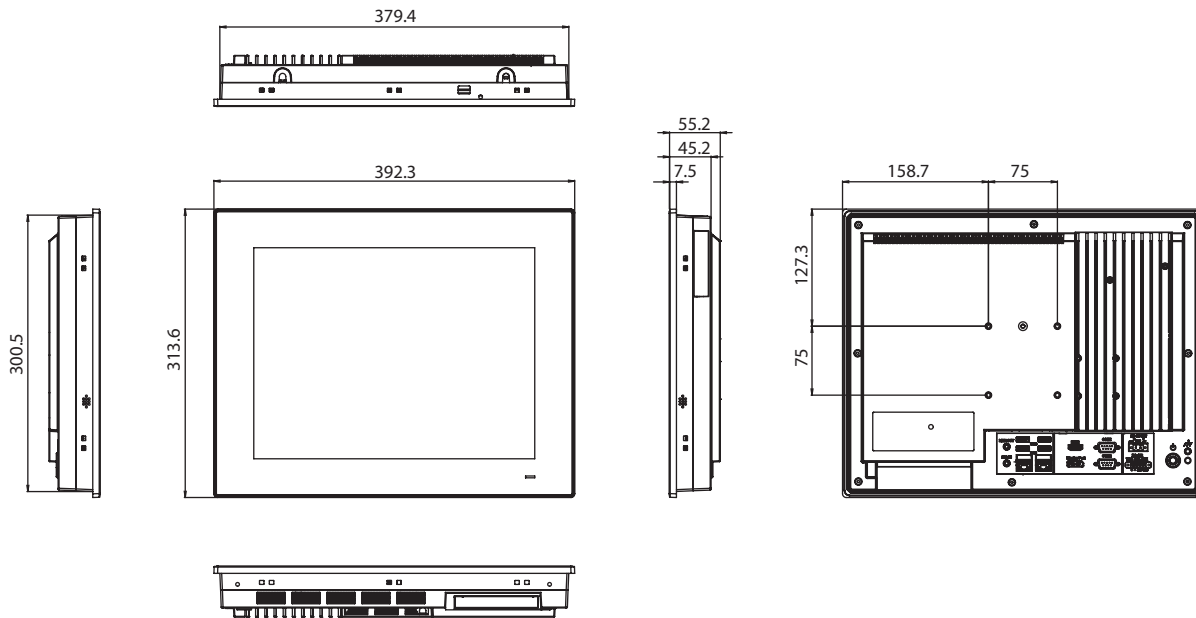
The PPC-415 EHL is a 15" fanless panel PC equipped with a high-performance Intel® Atom™ x6425E quad-core, 2.0 GHz, processor that supports both a wide operating temperature range (-20 ~ 60 °C) and wide power input range (9 ~ 32 V_{DC}). The provision of multiple I/O, including 4 x COM, 2 x USB 3.2, 1 x isolated RS-422/485, and dual Intel® Gigabit Ethernet, ensures easy integration and connectivity. With the inclusion of 1 x PCI/PCIe expansion slot, PPC-415 EHL can be integrated with fieldbus protocols or proprietary cards for increased application potential.

Specifications

System	CPU	Intel® Atom™ x6425E quad core
	Frequency	2.0 GHz
	L2 Cache	1.5 MB
	Memory	1 x SODIMM DDR4 3200 MHz (max. 32 GB)
	Storage	1 x 2.5" SATA bay 1 x M.2 B key bay (size: 2242/2280 or 3042/3052 mm; Singal: SATA, PCIe X1, USB 3.0)
	Network (LAN)	2 x 10/100/1000/2500 Mbps Ethernet (Intel i226)
	I/O	5 x Serial ports: 2 x RS-232, 1 x RS-422/485 with 1K V _{DC} isolation, 2 x RS-232 (on right side optional) 2 x USB 3.2, 3 x USB2.0 (2pcs default, 1pcs by request) 1 x Line-Out, 1 x Mic-In 1 x HDMI 1.4 1 x DisplayPort (1.4) 1 x 8bit GPIO (Optional) 1 x TPM2.0
	Expansion	1 x M.2 2230 E Key slot for wireless card 1 x PCIe x1 (default), 1 x PCI (optional); 1 x Cfast card (optional)
	Watchdog Timer	255 timer levels, set up by software
Speaker	2 x 1W	
Physical Characteristics	Dimensions	392.2 x 313.5 x 55.1 (15.4 x 12.3 x 2.1 in)
	Enclosure	Front bezel: Die cast aluminum alloy Rear: ABS
	Mounting	Panel Mount (Default); VESA Mount/ Desktop/ Wall (optional)
	Weight	5.3 kg (11.68 lb)
OS Support	OS Support	Microsoft® Win10 IOT LTSC (64-bit), Win11, Linux
Power Consumption	Input Voltage	9 ~ 32 V _{DC}
	Power Consumption	50W (Burn-in test 8.1 in Windows 10, 64 bit)
LCD	Display Type	15" TFT LED panel
	Max. Resolution	1024 x 768
	Viewing Angle	88 (left), 88 (right), 88 (up), 88 (down)
	Luminance (cd/m ²)	500
	Contrast Ratio	2500
	Backlight Lifetime	70,000 (typ.)
Touchscreen	Touch Type	5-wire analog resistive
	Light Transmission	80+/-3%
Environment	Controller	USB interface
	Operating Temperature	-20 ~ 60 °C (-4 ~ 140 °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, EN 61000-6-2, BSMI, VCCI, UKCA
	Safety	CB, UL, CCC, UKCA
	Front Panel Protection	IP66 compliant

Dimensions

Unit: mm



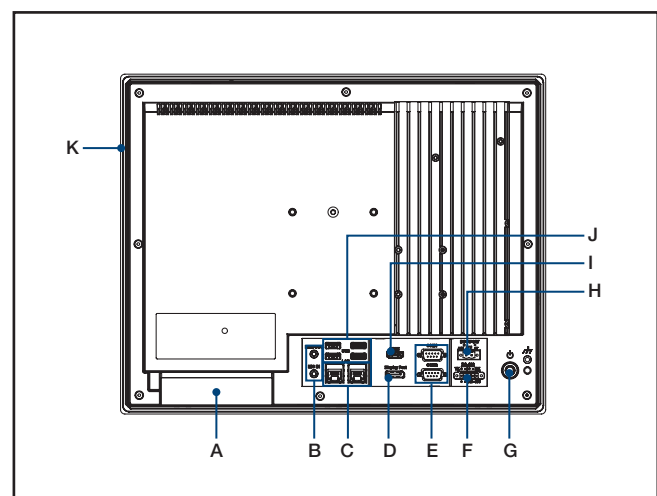
Panel Cutout Dimensions: 382 x 303 mm (15.03 x 11.92in)

Ordering Information

Part Number	Description
PPC-415-RX6A	15" PPC w/Intel x6425E, Res. T/S
PPC-WLAN-D2	M.2, WiFi6 +BT5.2, 2T2R, w/Antenna
PPC-174T-WL-MTE	Wall mount kit for PPC series
PPC-ARM-A03	PPC ARM VESA Standard
96PSA-A90W190T-3	Power adapter 100-240V 90W 19V
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 cord 3P CCC(China) 1.8M
PPC-STAND-A1E	Stand For PPC Series
98R1C415000	PPC-415/417 CFast card kits
98R3C31530E	Additional ports module (either two RS-232 or one RS-232 and one GPIO port)
989K821131E	PClex1 to PCI riser card

*. Shares cable with 2.5" SATA bay and cannot be used at the same time

I/O View



- A. 1 x Expansion slot (PCI or PCIe x1)
- B. Mic-in/Line-out
- C. 2 x Intel Gigabit Ethernet
- D. 1 x DisplayPort
- E. 2 x RS-232
- F. 1 x Isolated RS-422/485
- G. Power Button
- H. DC inlet and AT/ATX switch
- I. 1 x HDMI
- J. 2 x USB3.2, 2 x USB2.0
- K. Optional modules

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.