

# PPC-419 EHL

## 19" Fanless Panel PC with Intel® Atom™ x6425E Processor



### Features

- 19" SXGA 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<sub>DC</sub>)
- 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

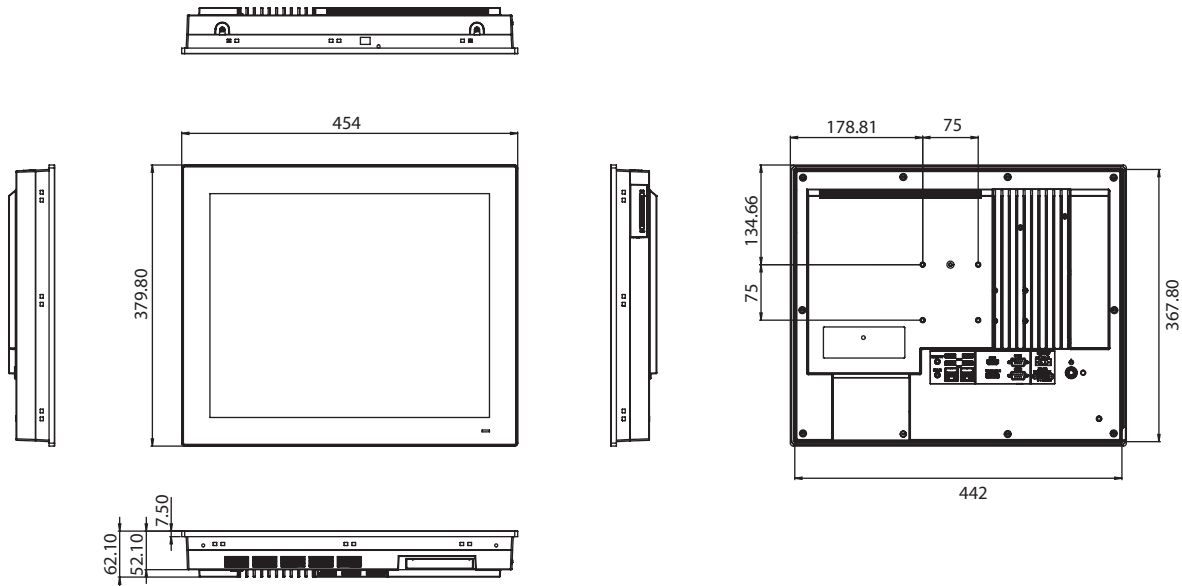
The PPC-419 is a 19" fanless panel PC equipped with a high-performance Intel® Atom™ x6425E quad-core, 2.0 GHz, processor that supports both a wide operating temperature range (-20 ~ 60 °C) and wide power input range (9 ~ 32 V<sub>DC</sub>). The provision of multiple I/O, including 4 x COM, 2 x USB 3.2, 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, the PPC-419 can be integrated with fieldbus protocols or proprietary cards for increased application potential.

### Specifications

<b>System</b>	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 <sub>DC</sub> 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
<b>Physical Characteristics</b>	Dimensions	454.0 x 379.8 x 62.1 mm (17.8 x 14.9 x 2.4 in)
	Enclosure	Front bezel: Die cast aluminum alloy Rear: ABS
	Mounting	Panel Mount (Default); VESA Mount/ Desktop/ Wall (optional)
	Weight	7.0 kg (15.4 lb)
	<b>OS Support</b>	OS Support
<b>Power Consumption</b>	Input Voltage	9 ~ 32 V <sub>DC</sub>
	Power Consumption	55W (Burn-in test 8.1 in Windows 10, 64 bit)
<b>LCD</b>	Display Type	19" TFT LED panel
	Max. Resolution	1280 x 1024
	Viewing Angle	85 (left), 85 (right), 80 (up), 80 (down)
	Luminance (cd/m <sup>2</sup> )	350
	Contrast Ratio	1000
	Backlight Lifetime	50,000 hr (min.)
<b>Touchscreen</b>	Touch Type	5-wire analog resistive
	Light Transmission	81+/-3%
	Controller	USB interface
	<b>Environment</b>	Operating Temperature
	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



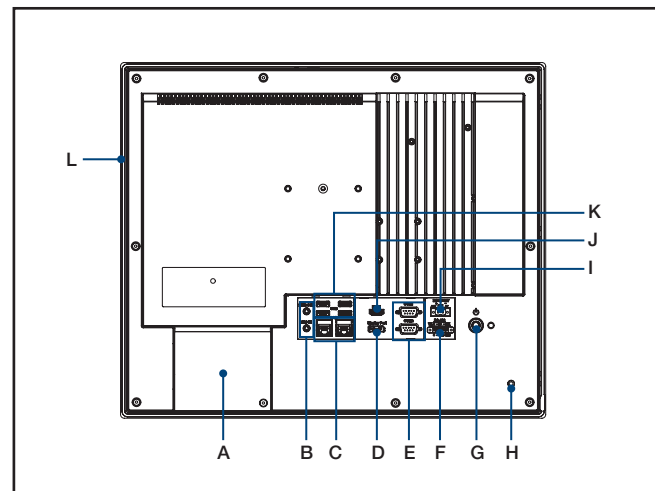
**Panel Cutout Dimensions: 444 x 370 mm (17.48 x 14.56 in)**

## Ordering Information

Part Number	Description
PPC-419-RX6A	19" 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 code 3P CCC(China) 1.8M
PPC-STAND-A1E	Stand For PPC Series
98R1C419000	PPC-419 CFast card kit
98R3C31900E	Additional ports module (either two RS-232 or one RS-232 and one GPIO port)
989K093802E	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. Ground Line
- I. DC inlet and AT/ATX switch
- J. 1 x HDMI
- K. 2 x USB 3.2, 2 x USB 2.0
- L. 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.