

# PPC-3190

## 19" Fanless Panel PC with Intel® Atom™ Quad-Core Processor



### Features

- 19" SXGA TFT LCD with resistive touchscreen
- Intel® Atom™ E3845 quad-core, 1.91 GHz, processor
- Fanless, slim design
- Supports 1 x internal 2.5" SATA HDD and 1 x mSATA
- 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 and dual Intel GbE
- Optional GPIO (8 channels, TTL level)

### Introduction

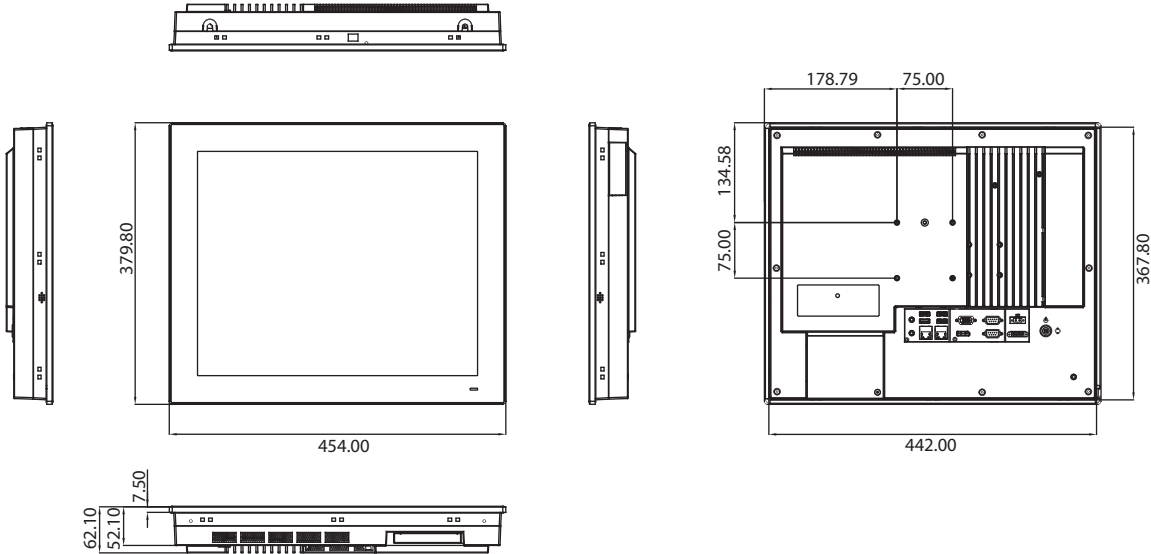
The PPC-3190 is a 19" fanless panel PC equipped with a high-performance Intel® Atom™ E3845 quad-core, 1.91 GHz, processor that supports both a wide operating temperature range (-20 ~ 60 °C) and wide power input range (9 ~ 32 V<sub>DC</sub>). The provision of multiple I/O, including 4 x COM, 1 x USB 3.0, 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-3190 can be integrated with fieldbus protocols or proprietary cards for increased application potential.

### Specifications

		PPC-3190-RE4BE
<b>System</b>	CPU	Intel® Atom™ E3845 quad core
	Frequency	1.91 GHz
	L3 Cache	2 MB
	Memory	1 x SODIMM DDR3L 1333 MHz (max. 8 GB)
	Storage	1 x 2.5" SATA bay 1 x mSATA bay
	Network (LAN)	2 x 10/100/1000 Mbps Ethernet (Intel I210)
	I/O	1 x isolated RS-422/485 (terminal block) 4 x RS-232, two external and two by internal pin header (need optional module) 1 x GPIO (8 channels, TTL level) by internal pin header (need optional module) 1 x USB 3.0, 3 x USB 2.0 1 x VGA 1 x DP1.1a 1 x Line-out, 1 x Mic-in
	Expansion	1 x Mini PCIe 1 x PCI (default); 1 x PCIe x1 (in the accessory box) Optional: 1 x Internal USB dongle; 2 x RS-232 or 1 x RS-232 + 1 x GPIO
	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)
	Weight	7.0 kg (15.4 lb)
<b>OS Support</b>	OS Support	Microsoft® Windows 7(32/64-bit)/10(64-bit), WES7P, WEC7, Win10 LTSC, Linux, Android 6.0
<b>Power Consumption</b>	Input Voltage	9 ~ 32 V <sub>DC</sub>
	Power Consumption	27W (Burn-in test 7.0 in Windows 7 32 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
	Durability (Touches)	36 million

**Dimensions**

Unit: mm



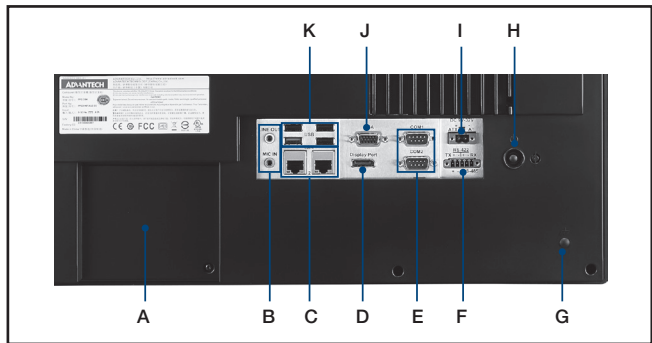
**Panel Cutout Dimensions: 444 x 370 mm (17.48 x 14.56 in)**

<b>Environment</b>	Operating Temperature	0 ~ 50 °C (32 ~ 122 °F) with 2.5" SATA SSD -20 ~ 60 °C (-4 ~ 140 °F) with -40 ~ 85 °C mSATA or 2.5" SATA SSD
	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, follow IEC 60068-2-64
	EMC	BSMI, CE, FCC Class A
	Safety	CB, CCC, BSMI, UL
	Front Panel Protection	IP65 compliant

**Ordering Information**

Part Number	Description
PPC-3190-RE4BE	True flat, Intel Atom E3845 with 19" LED, 5-wire resistive touch, assembled in China
PPC-3190-RE4B0	True flat, Intel Atom E3845 with 19" LED, 5-wire resistive touch, without audio function, assembled in China
PPC-3190-RE4BU	True flat, Intel Atom E3845 with 19" LED, 5-wire resistive touch, assembled in Taiwan
PPC-WLAN-C1E	M.2 Wi-Fi Module with Antenna cable support 2T2R
PPC-174T-WL-MTE	Wall mount kit for PPC series
PPC-ARM-A03	PPC ARM VESA Standard
PPC-3150-COME	Kit to install extra COMx2/DIOx1 for PPC-3150/3190
96PSA-A90W190T-3	A/D 100-240V 90W 19V C6 TERMINAL 2 PIN 62368
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
98R3C31500E	PPC-315/317/319 internal USB dongle kits

**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. Ground Line
- H. Power Button
- I. DC inlet and AT/ATX switch
- J. VGA x1
- K. 1 x USB 3.0, 3 x 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.