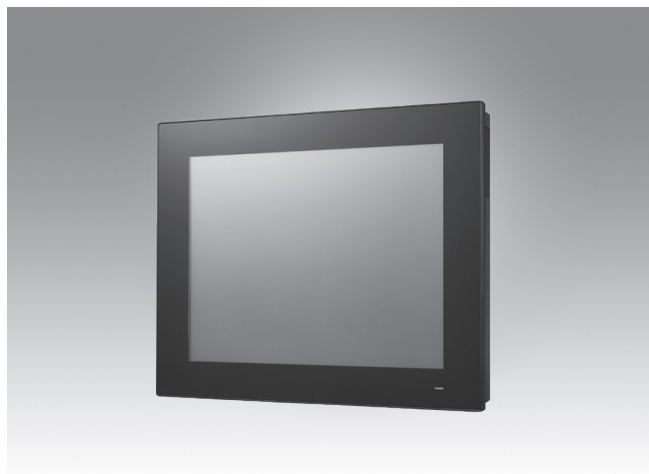


# PPC-415 TGL

## 15" Fanless Panel PC with Intel® 11th Gen Core™ I7/i5/i3 Processor



### Features

- 15" XGA TFT LCD flat panel with projected capacitive (default) or resistive (by request) touchscreen
- Intel® Core™ i7-1185G7E/i5-1145G7E/i3-1115G4E processor with fanless system design
- Dual channel memory slots, max 64G
- Supports either 1 x PCIe x4 or 1 x PCI
- 1 x M.2 bay (2242/2280 NVME or SATA Interface) for storage and support SATA RAID
- 1 x isolated RS-422/485 with auto flow
- Wide power input range (9 ~ 32 V<sub>DC</sub>)
- Dual 2500BASE-T Ethernet Supports Time-Sensitive Network(TSN) technology
- 3 x Independent displays
- Support TPM2.0 hardware security
- Supports VESA 75 mounting interface



### Introduction

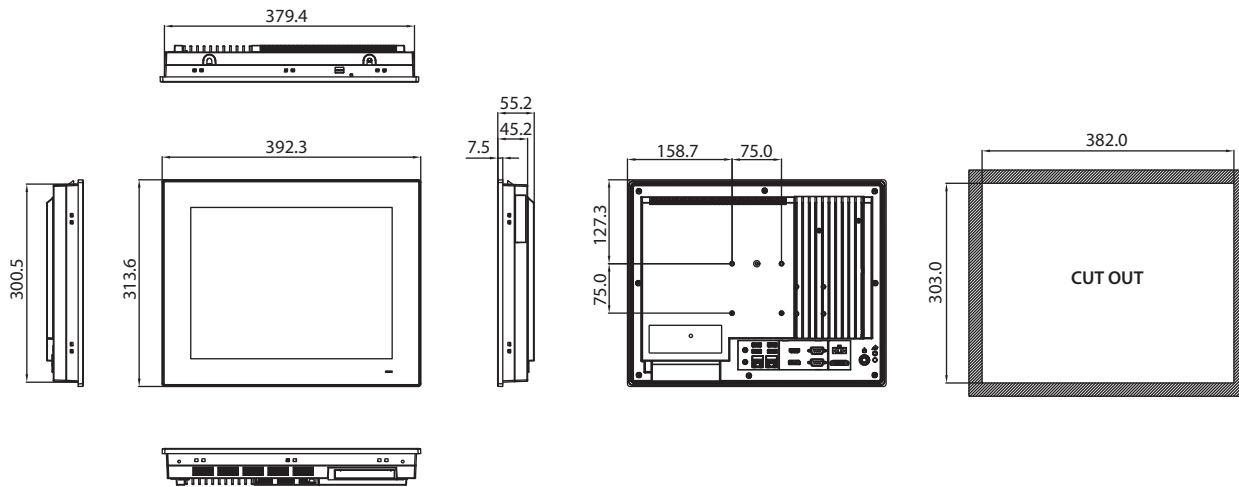
Designed for high-performance computing 11th gen applications, PPC-415 provides a superior human-machine interface and reliability, with multi-touch screen, rich I/O and aluminum alloy front bezel. The inclusion of PCIe/PCI slot for fieldbus or proprietary card expansion increases the system's compatibility for diverse applications. In addition, Time Sensitive Network(TSN)configuration integrated allows more possibilities for optimized industrial applications.

### Specifications

Model		PPC-415-PB70A	PPC-415-PB50A(U)	PPC-415-PB30A
Processor	CPU	i7-1185G7E	i5-1145G7E	i3-1115G4E
	Cores	4	4	2
	Base Frequency	1.8GHz	1.5GHz	2.2GHz
	Cache	12MB	8MB	6MB
	TDP	15W	15W	15W
	Memory	2 x SODIMM, DDR4 3200, max. 32GB x 2		
	Storage	1 x 2.5" SATA bay (Max. 7mm) 1 x M.2 2242/2280 M Key slot for Storage(SATA or NVME PCIe)		
	Network (LAN)	2 x Intel I225LM controller; Speed: 10M / 100M / 1000M / 2.5G		
	I/O	5 x Serial ports: 2 x RS-232, 1 x RS-422/485 with 1K VDC isolation, 2 x RS-232 (on right side optional) 4 x USB 3.2, 1 x USB2.0 (optional) 1 x Line-Out, 1 x Mic-In 1 x HDMI 1.4 1 x DisplayPort (1.2) 1 x 8bit GPIO (Optional) 1 x TPM2.0		
	Expansion	1 x M.2 2230 E Key slot for wireless card 1 x M.2 3042/3052 B key slot for 4G/5G module (PCIe or USB2.0) 1 x PCIe x 4 (Default); 1 x PCI (in the accessory box)		
Watchdog Timer	255 timer levels, setup via software			
Speaker	2 x 1W			
Physical Characteristics	Dimensions	392.3 x 313.6 x 55.2 mm (15.44 x 12.35 x 2.17 in)		
	Enclosure	Front bezel: Die cast aluminum alloy Back housing: PC+ABS		
	Mounting	Panel Mount (Default); VESA Mount/ Desktop/ Wall (optional)		
	Weight	5.4 kg (11.90 lb)		
OS Support	OS	Microsoft® Windows 10(64-bit), Win10 IOT LTSC, Linux		
Power Consumption	Input Voltage	9 ~ 32 V <sub>DC</sub>		
	Power Consumption	i5-1145G7E: 60W (Burn-in test 8.1 in Windows 10, 64 bit)		
LCD Panel	Display Type	15" TFT LED panel		
	Max. Resolution	1024 x 768		
	Viewing Angle	88° (left), 88° (right), 88° (up), 88° (down)		
	Luminance (cd/m <sup>2</sup> )	500		
	Contrast Ratio	2,500		
Touchscreen	Backlight Lifetime	70,000 hr		
	Touch Type	Projected capacitive 10-point multi-touch		
	Light Transmission	85% ± 3%		
Environment	Controller	USB interface		
	Operating Temperature	-10 ~ 50 °C (14 ~ 122 °F)		
	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), IEC 60068-2-27 compliant		
	Vibration	Operating random vibration test 5 ~ 500Hz, 1 Grms with HDD; 2 Grms with SSD, IEC 60068-2-64 compliant		
	EMC	CE, FCC Class B, BSMI, VCCI, UKCA		
	Safety	CB, UL, CCC, BSMI, UKCA		
	Front Panel Protection	IP66-rated		

## Dimensions

Unit: mm

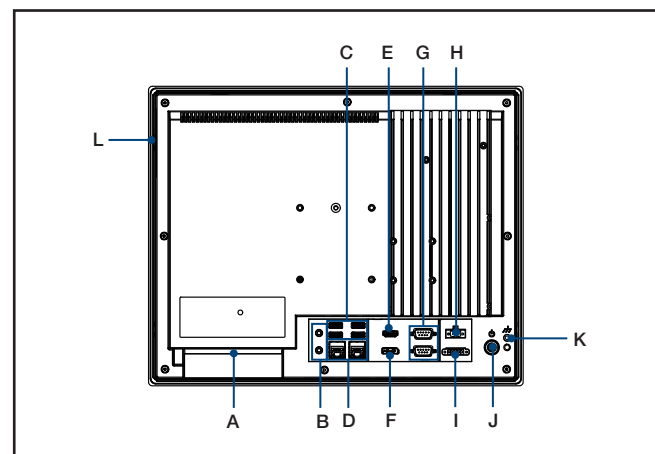


**Panel Cutout Dimensions: 382 x 303 mm (15.03 x 11.92 in)**

## Ordering Information

Part Number	Description
PPC-415-PB70A	15" Fanless PPC, PCT, Intel Core i7-1185G7E processor, assembled in China
PPC-415-PB50A	15" Fanless PPC, PCT, Intel Core i5-1145G7E processor, assembled in China
PPC-415-PB30A	15" Fanless PPC, PCT, Intel Core i3-1115G4E processor, assembled in China
PPC-415-PB50AU	15" Fanless PPC, PCT, Intel Core i5-1145G7E processor, assembled in Taiwan
96PSA-A90W190T-3	A/D 100-240V 90W 19V C6 TERMINAL 2 PIN 62368
1700001524	Power cable 3P UL 10A 125V, 180 cm
170203183C	Power cable 3P Europe (WS-010+083) 183 cm
1700008921	Power cable 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 (A-CLEVER) for PPC series
PPC-WLAN-C1E	M.2 Wi-Fi Module with Antenna cable support 2T2R
98R3C31530E	Module that supports two additional ports (either two RS-232 or one RS-232 and one GPIO port)
98R3C31500E	Internal USB dongle kits

## I/O View



- A. 1 x Expansion slot (PCI or PCIe x4)
- B. Line-Out/Mic-In
- C. 4 x USB 3.2
- D. 2 x Intel Gigabit Ethernet
- E. 1 x HDMI
- F. 1 x DisplayPort
- G. 2 x RS-232
- H. DC inlet and AT/ATX switch
- I. 1 x isolated RS-422/485
- J. Power button
- K. Grounding screw
- 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.