

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_{DC})
- 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

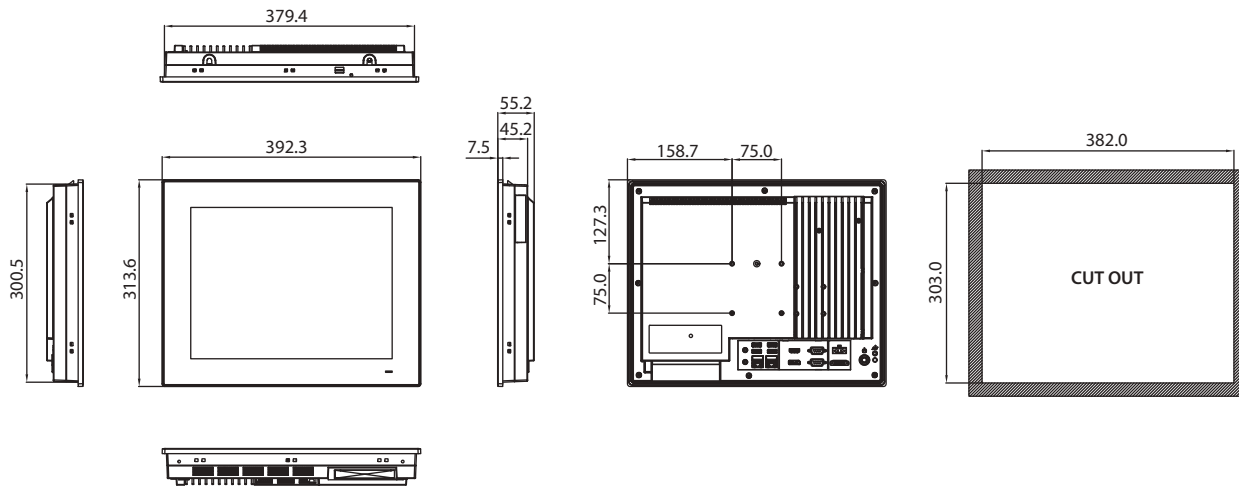
Designed for high-performance computing 11th gen applications, PPC-415 provides a superior human-machine interface and reliability, with multi-touch screen, rich I/O and aluminum alloy front bezel. The inclusion of PCIe/PCI slot for fieldbus or proprietary card expansion increases the system's compatibility 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		
	Input Voltage	9 ~ 32 V _{DC}		
Power Consumption	Power Consumption	i5-1145G7E: 60W (Burn-in test 8.1 in Windows 10, 64 bit)		
	Display Type	15" TFT LED panel		
LCD Panel	Max. Resolution	1024 x 768		
	Viewing Angle	88° (left), 88° (right), 88° (up), 88° (down)		
	Luminance (cd/m ²)	500		
	Contrast Ratio	2,500		
	Backlight Lifetime	70,000 hr		
Touchscreen	Touch Type	Projected capacitive 10-point multi-touch		
	Light Transmission	85% ± 3%		
	Controller	USB interface		
Environment	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

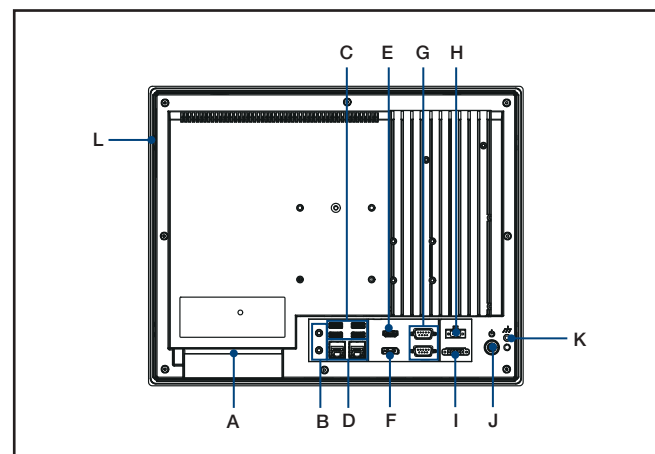


Panel Cutout Dimensions: 382 x 303 mm (15.03 x 11.92 in)

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.