PPC-421W

21.5" Fanless Widescreen Panel PC with Intel® 13th Gen Core™ i7/i5/i3 Processor



Features

- 21.5" true-flat Full HD LCD panel with projected capacitive touchscreen, anti-glare coating
- Intel® Core™ i7-1365URE/i5-1345URE/i3-1315URE processor with fanless system design
- Supports PCIe x4 or PCI expansion
- 1 x isolated RS-422/485 with auto flow
- Wide input power range (9 ~ 32 V_{DC})
- Dual 2500BASE-T Ethernet Supports Time-Sensitive Network(TSN) technology
- 3 x Independent displays
- 1 x M.2 bay (2242/2280) for storage only
- Support TPM2.0 hardware security
- Supports VESA 75/100 mounting interface

Introduction

Designed for high-performance computing 13th gen applications, PPC-421W with a 21.5" FHD 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.

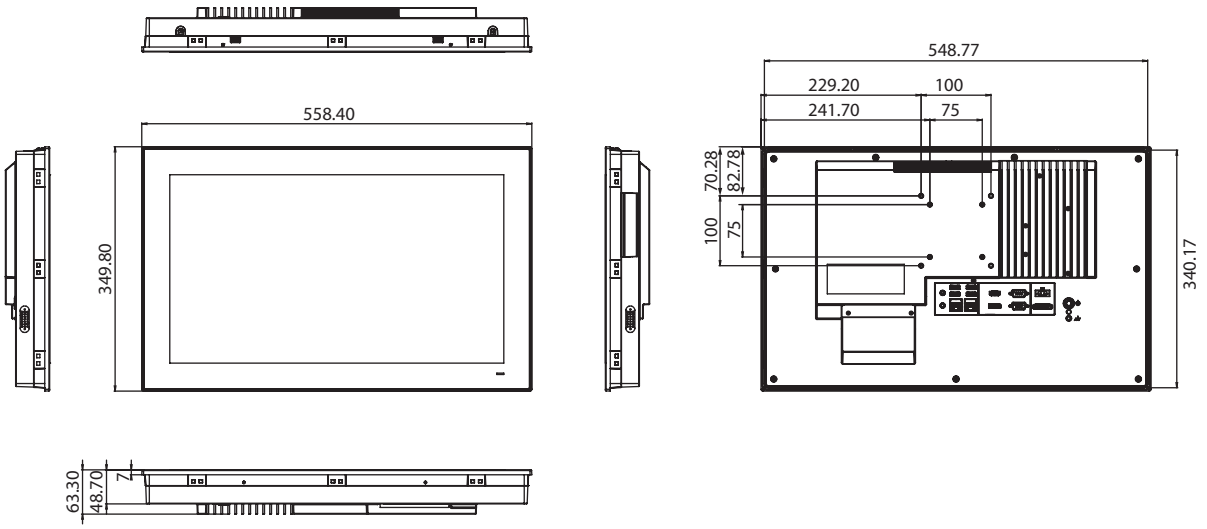
Specifications

System	CPU	i7-1365URE	i5-1345URE	i3-1315URE
	Core	10	10	6
	Frequency	1.70 GHz upto 4.9 GHz with Turbo	1.40 GHz upto 4.6 GHz with Turbo	1.20 GHz upto 4.5 GHz with Turbo
	Cache	12 MB Intel® Smart Cache	12 MB Intel® Smart Cache	10 MB Intel® Smart Cache
	Memory	2 x SODIMM, DDR5 4800, max. 32GB x 2		
	Storage	2 x 2.5" SATA bay (Max. 7mm) 1 x M.2 2242/2280 M Key slot for Storage (SATA or NVME PCIe x 4 , support SATA RAID)		
	Network (LAN)	2 x Intel I226LM 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) 3 x USB 3.2, 1 x USB2.0 1 x Line-Out, 1 x Mic-In 1 x HDMI 1.4 1 x DisplayPort (1.4a) 1 x 8bit GPIO (optional)		
	Expansion	1 x M.2 2230 E Key slot for wireless card 1 x PCIe x 4; 1 x PCI (optional)		
	Watchdog Timer	255 timer levels, set up by software		
	Security	1 x TPM2.0		
	Speaker	2 x 1W		
Physical Characteristics	Dimensions	558.4 x 349.8 x 63.8 (22.0 x 13.7 x 2.5 in)		
	Enclosure	Front bezel: Die cast aluminum alloy Rear: PC+ABS		
	Mounting	Panel / VESA (75/100)		
	Weight	7.7 kg (17.1 lb)		
OS Support	OS Support	Microsoft® Windows 11 (64-bit), Win 10 IOT LTSC, Linux		
Power Consumption	Input Voltage	9 ~ 32 V_{DC}		
	Power Consumption	i5-1345URE Typ.75W Max.110W (Burn-in test 8.1 in Windows 10 64bit)		
LCD	Display Type	21.5" TFT LCD (LED backlight)		
	Max. Resolution	1920 x 1080		
	Viewing Angle	89 (Left), 89 (Right), 89 (Up), 89 (Down)		
	Luminance (cd/m²)	350		
	Contrast Ratio	1000		
	Backlight Lifetime	30,000 hr (min.)		
Touchscreen	Touch Type	Multi-touch projected capacitive		
	Light Transmission	88 % ± 2 %		
	Controller	USB interface		
Environment	Operating Temperature	-20 ~ 60 °C (-4 ~ 140 °F)		
	Storage Temperature	-30 ~ 60 °C (-22~140 °F)		
	Relative Humidity	95% @ 40 °C (Non-Condensing)		
	Shock	Operating 10 G Peak Acceleration (11 ms Duration), Follows IEC 60068-2-27		
	Vibration	Operating Random Vibration Test 5 ~ 500Hz, 2Grms @with SSD, Follows IEC 60068-2-64		
	EMC	CE, FCC Class B, EN 61000-6-2, BSMI, UKCA		
	Safety	CB, UL, CCC, UKCA		
	Front Panel Protection	IP66 compliant		

All product specifications are subject to change without notice.

Dimensions

Unit: mm

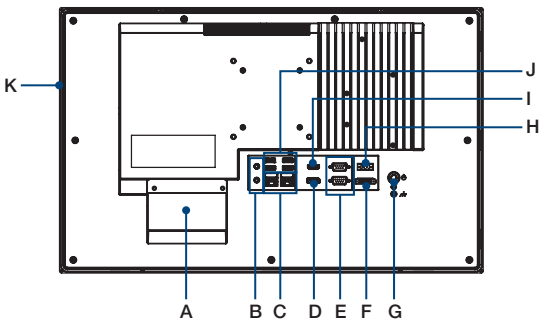


Panel Cutout Dimensions: 550.3 x 341.8 mm (21.66 x 13.45 in)

Ordering Information

Part Number	Description
PPC-421W-PD3A	21.5" PPC w/Intel i3-1315URE, P-CAP
PPC-421W-PD5A	21.5" PPC w/Intel i5-1345URE, P-CAP
PPC-421W-PD7A	21.5" PPC w/Intel i7-1365URE, P-CAP
96PSA-A120W24T2-4	Power adapter 100-240V 120W 24V
1702002600	Power Cable UL/CSA (USA) 180D 125V10A 1.83M
1702002605	Power Cable 90D 220V EUROPEAN 250V/6A 1.8M
1700000237	Power Cord PSE 3P 12A 125V 183cm
96CB-POWER-B-1.8MA	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 for PPC series
PPC-WLAN-D2	M.2, WiFi6 +BT5.2, 2T2R, w/Antenna
98R3P321100	Additional ports module (either two RS-232 or one RS-232 and one GPIO port)
989KB01001E	PCIex1 to PCI riser card

I/O View



A. 1 x Expansion slot (PCI or PCIe x1)
B. 1 x 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. 1 x Power button
H. 1 x DC inlet and AT/ATX switch
I. 1 x HDMI
J. 3 x USB3.2, 1 x USB2.0
K. 2 x RS-232 (on right side optional)

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.