

# PPC-321W TGL

## 21.5" Fanless Panel PC with Intel® Core™ i7/i5/i3 Processor



### Features

- Industrial-grade 21.5" LCD panel with 50k backlight lifetime
- True-flat touchscreen with multi-touch projected capacitive control
- High-performance, fanless 11th generation Intel® Core™ i processor
- Dual channel memory slots, max 64G
- Compact, fanless design with aluminum alloy enclosure
- IP66-rated front panel
- Supports dual displays (1 x external HDMI)
- 1 x M.2 bay (2242/2280 NVME or SATA Interface) for storage and support SATA RAID 0, 1
- 1 x 2500BASE-T Ethernet Supports Time-Sensitive Network(TSN) technology
- Supports VESA 100
- Support TPM2.0 hardware security
- Supports Type C (USB Only)



### Introduction

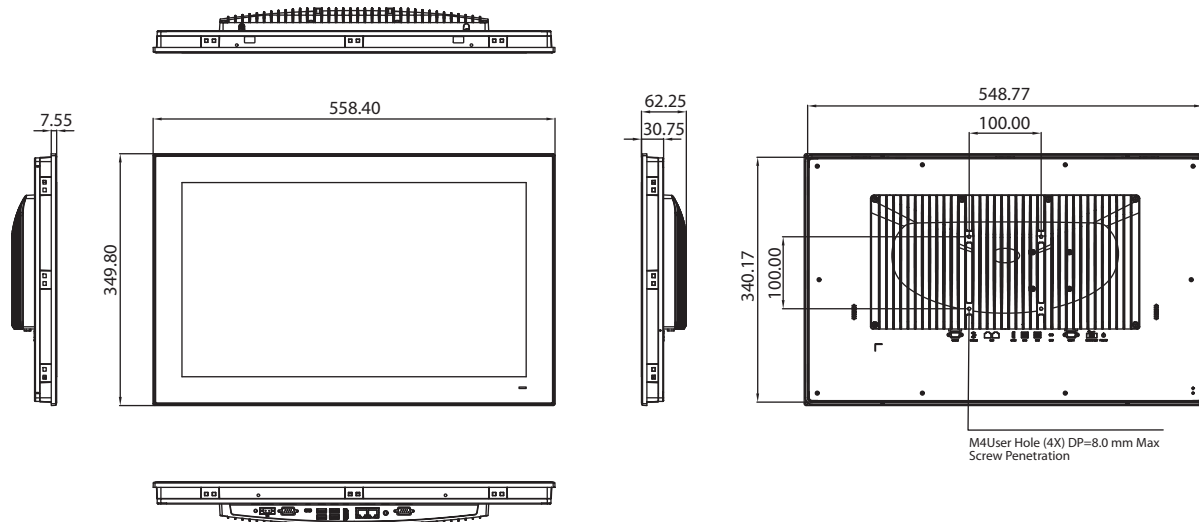
PPC-321w TGL is an 21.5" Fanless Panel PC equipped Intel 11th Gen Core i7/i5/i3, providing high computing performance with robust aluminum alloy enclosure. It also leverages M.2 M key NVMe PCIe to accommodate extremely high data rate and low latency advantage. PPC-321w TGL features 3 x USB 3.2, 2 x series ports and 1 x HDMI for flexible access and connection. The PPC-321w TGL is an excellent solution to enable quick data capture, processing and data digitalization in various industrial applications.

### Specifications

<b>System</b>	CPU	i3-1115G4E	i5-1145G7E	i7-1185G7E
	Cores	Dual Core	Quad Core	Quad Core
	Frequency	2.2GHz; 3.90GHz with turbo boost	1.5GHz; 4.10GHz with turbo boost	1.8GHz; 4.40GHz with turbo boost
	Cache	6 MB	8 MB	12 MB
	TDP	15W	15W	15W
	Memory	2 x SO-DIMM DDR4 3200MHz (max. 32GB x 2)		
	Storage	1 x 2.5" SATA bay 1 x M.2 2280 M-Key bay (Co-lay SATA, for storage only)		
	Network (LAN)	1 x Intel I219LM controller; Speed: 10M / 100M / 1000M 1 x Intel I226LM controller; Speed: 10M / 100M / 1000M / 2500M		
	I/O	2 x Serial ports: 1 x RS-232, 1 x RS-232/422/485(Adjustable through BIOS) 3 x USB 3.2, 1 x USB 2.0, 2 x USB 2.0 (internal), 1 x Type C (USB only) 1 x HDMI1.4 1 x TPM 2.0 1 x Line out		
	Speaker	2 x 1W		
Expansion	1 x M.2 2230 E-key for wireless card			
Watchdog Timer	255 timer levels, set up by software			
<b>Physical Characteristics</b>	Dimensions	558.4 x 349.8 x 62.2 mm (21.9 x 13.7 x 2.4 in)		
	Weight	6.6 kg (14.6 lb)		
<b>OS Support</b>	OS Support	Microsoft® Windows 10 IOT LTSC(64-bit), Win 11, Linux		
<b>Power Consumption</b>	Input Voltage	12 ~ 30 V <sub>DC</sub>		
	Power Consumption	75W (Burn-in test 8.1 in Windows 10 64-bit)		
<b>LCD</b>	Display Type	21.5" TFT LCD (LED backlight)		
	Resolution	1920 x 1080		
	Viewing Angle	89 (left), 89 (right), 89 (up), 89 (down)		
	Luminance (cd/m <sup>2</sup> )	250		
	Contrast Ratio	1000		
	Backlight Lifetime	50,000 hr		
<b>Touchscreen</b>	Touch Type	10-point multi-touch projected capacitive		
	Light Transmission	≥88%		
	Controller	USB interface		
<b>Environment</b>	Operating Temperature	-10 ~ 50 °C (-4 ~ 122 °F)		
	Storage Temperature	-20 ~ 60 °C (-4 ~ 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, BSMI, VCCI, UKCA		
	Safety	CB, UL, CCC, UKCA		
Front Panel Protection	IP66 compliant			

## Dimensions

Unit: mm

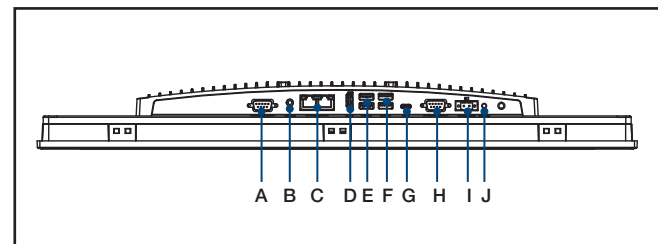


**Panel Cutout Dimensions: 550.3 x 341.8 mm (21.66 x 13.45 in)**

## Ordering Information

Part Number	Description
PPC-321W-PB50A	21.5" PPC w/Intel i5-1145G7E, P-Cap
PPC-321W-PB30A	21.5" PPC w/Intel i3-1115G4E, P-Cap
PPC-321W-PB70A	21.5" PPC w/Intel i7-1185G7E, P-Cap
96PSA-A120W24T2-4	Power adapter 100-240V 120W 24V
PPC-WLAN-D2	M.2, WiFi6 +BT5.2, 2T2R, w/Antenna
PPC-ARM-A03	ARM VESA Standard for PPC series
PPC-174T-WL-MTE	Wall mount kit for PPC series
PPC-Stand-A1E	Stand for PPC series
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
98R3P300010	PPC-300 RFID Read only 13.56MHz&125k

## I/O View



- |                             |                          |
|-----------------------------|--------------------------|
| A. COM2: 1 x RS-232/422/485 | F. 2 x USB 3.2           |
| B. 1 x Line out             | G. 1 x Type C (USB only) |
| C. 2 x LAN                  | H. COM1: RS-232          |
| D. 1 x HDMI 1.4             | I. DC In                 |
| E. 1 x USB 2.0, 1 x USB 3.2 | J. Power Button          |

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.