

# PPC-12WDC-12th

12th Generation Intel® Core™  
i3-1215U / i5-1235U / i7-1255U processor



## Features

- Industrial-grade 12.1" WXGA LCD panel with 50k backlight lifetime
- True-flat touchscreen with multi-touch projected capacitive control
- IP66 grade aluminum alloy front panel
- 12th Gen Intel® Whiskey Lake Core™ i3 / i5 / i7 Processor
- 2 x DDR5 SDRAM, max.64GB, 2 x M.2 2280 NVMe or SATA SSD
- 2 x Intel® 226-V 2.5GbE, 1 x Intel® 219 1GbE Ethernet, WoL and PXE
- 2 x RS232/422/485, RS485 support automatic flow control
- Supports TPM2.0 security encryption and Intel vPro® Essentials
- Supports embedded / VESA 100mm x 100mm mounting holes
- 9V to 36V DC Wide Range Power Input, Supporting OVP / OCP / RPP

## Specifications

System			
CPU	12th Gen Intel® Core™ i3-1215U	12th Gen Intel® Core™ i5-1235U	12th Gen Intel® Core™ i7-1255U
L3 Cache	10MB	12MB	12MB
TDP	15W	15W	15W
Graphics	Intel® UHD Graphics	Intel® Iris® Xe Graphics	Intel® Iris® Xe Graphics
System Chipset	Integrated With Intel® SoC		
Memory	2 x DDR5 4800MHz 8GB, Up to 64GB		
Harddisk	2 x M.2 120G SSD ( 250G / 500G / 2TB SSD)		
Network	2 x Intel® I226, 2.5GbE / 1 x Intel® I219, 1GbE		
Audio	Realtek ALC897 Audio controller		
TPM	TPM 2.0		
Watchdog Timer	255 Timer Levels, Set up by Software		
Operation System	Windows 10 / 11, Linux, Ubuntu		
I/O			
VIDEO	1 x H-DMI		
Ethernet	3 x RJ45		
USB	4 x USB 3.2 / 1 x Type-C x 1 ( USB 3.0 Gen 2, DP 1.4 )		
COM	2 x RS-232 / 422 / 485 ( Adjustable through BIOS )		
Audio	1x Audio_out & Mic_in		
Wireless Network	Optional ( WiFi / Bluetooth / 4G / 5G )		
Expansion			
M.2	1*M.2 ( Key-E, 2230, PCIe+USB, Wifi+BT )		
	1*M.2 ( Key-B, 3042/3052, PCIe/ USB 3.0+USB2.0, 4G/5G )		
	2*M.2 ( Key-M, 2280, NVMe/ SATA, SSD )		
SIM Socket	1x SIM Socket		
Display			
LCD Size	12.1" ( 16:10 )		
Resolution	1280 x 800		
Brightness (cd/m²)	400		
Contrast Ratio	1000:1		
Backlight MTBF	50,000 hrs ( LED Backlight )		
Viewing Angle	89 / 89 / 89 / 89 (CR≥10) ( L / R / U / D )		
Touch screen			
Touch Type	Projected Capacitive Multi-touch		
Surface Hardness	≥7H		

We reserve the right to change specifications and product descriptions at any time without prior notice.

Power	
Power Adapter	1 x Optional AC/DC 12V/5A , 60W
Power Mode	Support AT, ATX Mode
Power Input	9~36VDC, 2-Pin Terminal Block Connector with Power Input
Power Protection	OVP (Over Voltage Protection)   OCP (Over Current Protection)   RPP (Reverse Polarity Protectio
Power Consumption	≤45W
Physical	
Material	Aluminum alloy panel, anodized treatment
Mounting	Stand / Wall / VESA / Panel
Dimension (W x H x D)	304 x 206 x 60 mm
Cut-out Size	/
Packing Size	450 x 170 x 350 mm
Weight (Net)	3.1KG
Environment	
Operating Temperature	-20~70°C ( -4~158°F )
Storage Temperature	-30~80°C (-22~176°F)
Relative Humidity	5%~95%@40°C, non-condensing
Vibration Protection	1.5 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 hr/axis
IP Level	Front Panel IP66
EMC	CE, FCC, UL, KC , Class A, ROHS , IEC, EN 62368-1

### Dimension & I/O

The technical drawing includes three views of the panel PC: a front view showing a 12.1" diagonal screen and a 304.00 mm width; a side view showing a 206.00 mm height and a 60.00 mm depth; and a back view showing the internal PCB layout. Dimensions are provided in millimeters. The I/O definitions are as follows:

I / O Definition:	
A: DC 9V~36V	B: COM1-RS-232/422/485
C: COM2	D: 2 x LAN
E: 1 x H-DMI	F: 2 x USB 3.2
G: 1 x LAN	H: 2 x USB 3.2
I: Type-C ( USB / DP )	J: Audio
K: Power Button	

### Ordering info

Available models	Description
PPC-3012WDC	12.1" Fanless Industrial Panel PC 12th Generation Intel® Core™ i3-1215U 1.2GHz Processor With Capcice touch
PPC-5012WDC	12.1" Fanless Industrial Panel PC 12th Generation Intel® Core™ i5-1235U 1.3GHz Processor With Capcice touch
PPC-7012WDC	12.1" Fanless Industrial Panel PC 12th Generation Intel® Core™ i7-1255U 1.7GHz Processor With Capcice touch

### Packing list

1 x Standard product
1 x 60W PSU (Power Supply)
1 x Power cable & plug