



## Features

- Industrial-grade 23.8" FHD LCD panel with 30k backlight lifetime
- Optical bonding PCAP multipoint touch screen
- Intel® Alder Lake-N N97 Quad-core 2.0GHz processor
- 1 x DDR5 SDRAM, max.32GB, 1 x M.2 2280 NVMe or SATA SSD
- SP13 I/O ports: 2 x LAN / 2 x USB / 1 x COM
- Full device IP66/IP69K with Strong aluminum alloy casing
- Support TPM2.0 hardware security
- Wide Operating Temperature -20°C to 70°C
- 9V to 36V DC Wide Range Power Input, Supporting OVP / OCP / RPP

## Specifications

System	
CPU	Intel® Alder Lake-N N97 Quad-core 2.0GHz , TDP 12W
L2 Cache	2.0MB
System Chipset	Integrated with Intel® SoC
Memory	1 x DDR5L 4800MHz 4GB, MAX 32GB
Harddisk	1 x M.2 120G SSD ( 250G / 500G / 2TB SSD)
Graphics	Intel® UHD Graphics
Network	Intel® 226-V GbE LAN
Audio	Realtek ALC897 Audio controller
TPM	TPM 2.0
Watchdog Timer	Software Programmable Supports 1~255 sec. System Reset
Operation System	Windows 10 / 11, Linux, Ubuntu
I / O	
VIDEO	1 x H-DMI ( Optional )
Ethernet	2 x SP13 Waterproof Giga LAN RJ45 Connector
USB	2 x SP13 Waterproof Connector For USB2.0
COM	1 x SP13 Waterproof Connector For COM
Wireless Network	Optional ( WiFi / Bluetooth / 4G / 5G )
Other I/O Interface	1 x Power Switch
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 )
	1*M.2 ( Key-M, 2280,NVMe/ SATA, SSD )
SIM Socket	1x SIM Socket
Display	
LCD Size	23.8" ( 16:9 )
Resolution	1920 x 1080 ( FHD )
Brightness (cd/m <sup>2</sup> )	350 cd/m <sup>2</sup>
Contrast Ratio	1000:1
Backlight MTBF	30000 hrs
Viewing Angle	89 / 89 / 89 / 89 (CR≥10) ( L / R / U / D )
Touch screen	
Touch Type	Optical bonding PCAP Touch
Surface Hardness	≥7H

Power	
Power Input	1 x SP13 Waterproof Connector For 9V~36V DC
Power Mode	Support AT, ATX Mode
Power Protection	OVP (Over Voltage Protection)   OCP (Over Current Protection)   RPP (Reverse Polarity Protection)
Power Consumption	≤45W
Physical	
Material	Aluminum Alloy Shell
Mounting	Stand / Wall / VESA
Dimension (W x H x D)	583 x 353 x 40 mm
Packing Size	730 x 190 x 530 mm
Weight (Net)	9.5 KG
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	IP66 / IP69K
EMC	CE, FCC, Class A, ROHS

### Dimension & I/O

**Product Dimensions: 583 x 352.5 x 40 mm ( 22.95 x 13.88 x 1.57 in )**

**I / O Definition:**

A: Power Button	B: Breather Valve
C: COM ( optional )	D: USB ( optional )
E: USB ( optional )	F: LAN ( optional )
G: LAN ( optional )	H: DC 9V~36V

### Ordering info

Available models	Description
WPC-N024WAC	23.8" Fanless Waterproof Industrial PC Intel® Alder Lake-N N97 2.0GHz Processor With Capcice touch

### Packing list

1 x Standard product
1 x 60W PSU (Power Supply)
2 x SP13 Waterproof USB Cable 2M
1 x SP13 Waterproof COM Cable 2M
2 x SP13 Waterproof LAN Cable 2M