



Features

- Industrial-grade 15.6" FHD LCD panel with 50k 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
- M12 I/O ports: 2 x LAN / 2 x USB / 1 x COM
- Full device IP66/IP69K with Stainless Steel SUS304/316 construction
- 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	DDR5L 4800MHz 8GB, 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 ACL897 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 M12 Waterproof Giga LAN RJ45 Connector
USB	2 x M12 Waterproof Connector For USB2.0
COM	1 x M12 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	15.6" (16:9)
Resolution	1920 x 1080 (FHD)
Brightness (cd/m ²)	450 cd/m ²
Contrast Ratio	1000:1
Backlight MTBF	50000 Hr (min.)
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 M12 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	≤35W
Physical	
Material	Inox / SUS304 / SUS316 (Optional)
Mounting	Stand / Wall / VESA / Yoke
Dimension (W x H x D)	398 x 248 x 45 mm
Packing Size	460 x 180 x 400 mm
Weight (Net)	7.0 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

The technical drawing includes three views of the device: a front view showing a 15.6" diagonal (FHD) screen and a 398.00 mm width; a side view showing a 248.00 mm height and a 45.00 mm depth with 2-M5.0 mounting holes; and a top view showing the I/O panel layout with dimensions of 100.00 mm between the power button and the first LAN port, and 100.00 mm between the first and second LAN ports.

I / O Definition:

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

Product Dimensions: 398 x 248 x 45 mm (15.67 x 9.76 x 1.77 in)

Ordering info

Available models	Description
WPC-N156WDC	15.6" Fanless Stainless Steel HMI Intel® Alder Lake-N N97 Quad-core 2.0GHz Processor With Capacitive touch

Packing list

1 x Standard product
1 x 60W PSU (Power Supply)
2 x M12 Waterproof LAN Cable 2M
2 x M12 Waterproof USB Cable 2M
1 x M12 Waterproof COM Cable 2M