

Features

- 21.5" Industrial Grade Multitouch Panel PC
- Intel Core Ultra 5/7 Processor
- Support 1 x DDR5-5600MHz SO-DIMM
- IP66 Compliant Aluminum Narrow Bezel Design
- 7H Anti-scratch Projected Capacitive Multi-touch Screen
- Support High Brightness LCD (optional)
- Support Auto-Dimming(PB-49/50)(optional)
- Power Input : DC 9-36V
- Fanless Design

Specifications

System	
CPU	Intel Core Ultra 5 125U (2 P-Cores x 1.3GHz, 8 E-Cores x 0.8GHz, 12MB cache, 15W) Intel Core Ultra 7 155U (2 P-Cores x 1.7GHz, 8 E-Cores x 1.2GHz, 12MB cache, 15W)
System Chipset	SoC
BIOS	AMI UEFI
System Memory	1 x DDR5-5600MHz SO-DIMM, up to 48GB

I/O Port	
USB	4 x USB 3.2 Gen1 Type-A, 2 x USB 2.0 Type-A (optional)
Serial	1 x DB9, supports RS-232/422/485 (COM1, BIOS selection, RS-232 is default) 1 x DB9, supports RS-232/422/485 (COM2, BIOS selection, RS-232 is default), optional 1 x DB9, supports RS-232 (COM3), optional
Display Output	1 x HDMI 2.1, resolution up to 7680x4320@60 Hz 1 x DP 1.4, resolution up to 7680x4320@60Hz
LAN	2 x RJ-45, support Intel I226V/IT 2.5GbE LAN
Power	1 x Terminal Block, supports DC 9-36V Power input

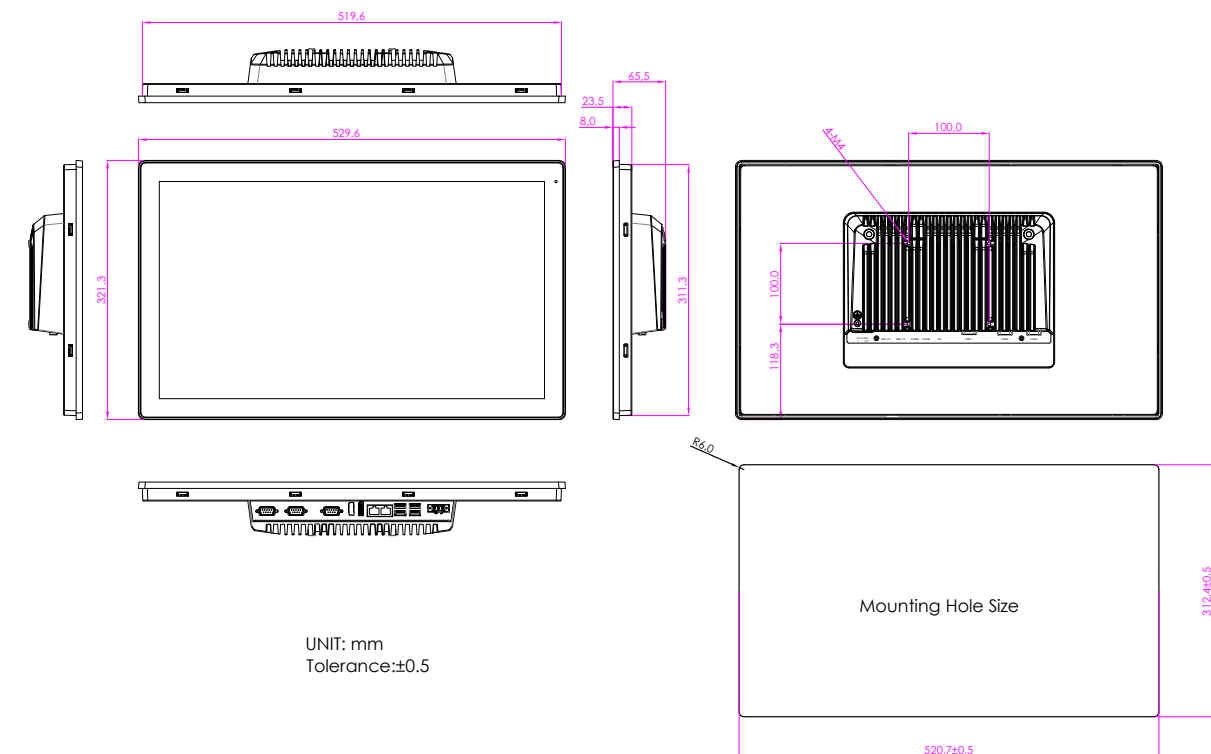
Storage Space	
HDD/SSD	1 x M.2 2280 M-Key socket (PCIe 3.0 x4)

Expansion	
Expansion slot	1 x M.2 2230 E-Key (USB2.0, PCIe x1) for optional Wi-Fi/BT module 1 x M.2 3042/3052 B-key (PCIe x1, USB3.2 Gen1, USB2.0) for optional LTE/5G module 1 x Nano-SIM slot

Others	
TPM	Onboard TPM2.0
Watchdog Timer	1~255 sec (system)
Wake on LAN	Support WOL

Display	Standard	High Brightness Optional
Display Type	21.5" TFT-LCD	21.5" TFT-LCD
Max. Resolution	1920 x 1080, FHD	1920 x 1080, FHD
Max. Color	16.7M	16.7M
Luminance (cd/m ²)	250	1,000
View Angle	178(H)/178(V)	170(H)/170(V)
Contrast	1000:1	1000:1
Backlight Lifetime	50,000 hrs	50,000 hrs

Dimensions



Touch Screen	
Type	Projected Capacitive Touch
Interface	USB
Light Transmission(%)	90%

Power	
Power Input	DC 9~36V
Power Consumption	35.7W

Mechanical	
Construction	Aluminum Die-casting Chassis
Mounting	Panel Mount, VESA 100 x 100
Dimensions (WxHxD)	529.6 x 321.3 x 65.5 mm
IP Rating	IP66 Compliant Front Bezel
Net Weight	2.74 kg

Environmental	
Operating Temperature	0~50°C
Storage Temperature	-10~60°C
Humidity	10 to 95%@ 40°C, non-condensing
Certificate	CE/FCC, Class A

Operating System Support	
Windows 10 IoT Enterprise 2021 LTSC or later, Windows 11 (21H2) or later, Linux 24.04	

Ordering Information	
AiTRON-921EP	21.5" FHD fanless HMI barebone with Intel Core Ultra 5/7, 1 x DDR5 slot, 1 x M.2 M-key slot, 1 x M.2 E-key slot, 1 x M.2 B-key slot, Projected Capacitive Touch, 9~36V DC input with adapter, Aluminum chassis.
AiTRON-921EPH	21.5" FHD High Brightness fanless HMI barebone with Intel Core Ultra 5/7, 1 x DDR5 slot, 1 x M.2 M-key slot, 1 x M.2 E-key slot, 1 x M.2 B-key slot, Projected Capacitive Touch, 9~36V DC input with adapter, Aluminum chassis.