

Features

- 21.5" Industrial Compact Size Panel PC
- Flat front panel touch screen
- Fanless design
- Intel Celeron N2930(1.83GHz) CPU built-in
- Onboard 4GB DDR3L 1333 MHz/8GB(option)
- Wide range DC 9~36V power input
- IP66 compliant front panel
- Optional projected capacitive touch screen support 7H anti-scratch surface
- High brightness 1,000nits LCD for NV-HMI-821(P)H
- Optical bonding for option
- Auto dimming for option for NV-HMI-821(P)H

Specifications

System	
CPU	Onboard Intel Celeron N2930(1.83GHz) Processor
System Chipset	SoC
Memory	Onboard 4GB DDR 3L 1333 MHz/8GB(option)

IO Port	
USB	2 x USB 3.0 type A
Serial/Parallel	1 x RS-232 DB-9, COM2 1 x RS-232/422/485 DB-9, COM1, default RS-232
Audio	1 x Audio Line Out
LAN	2 x GbE LAN RJ-45 with Intel 82574L controller
Power	1 x 3-pin DC power input terminal 1 x 2-pin connector for power on/off button
Option	2 x RS-232 DB-9 + 1 x Mini-PCIe slot via TB-528C2ME1 2 x CAN bus via TB-528CAN2 2 x USB 2.0 type A Via TB-528U2 2 x USB 2.0 type A + 1 x RS-232 DB-9 + 1 x Power button via TB-528C1U2P1 UPS Battery 21W/10.8V/1.95Ah(3S1P)

Storage Space	
HDD	1 x SATA 2.5" HDD bay for SATA HDD (easy accessible)
movable device	1 x SD card slot, up to 32GB

Expansion	
Expansion Slot	1 x Internal Mini-PCIe slot full size

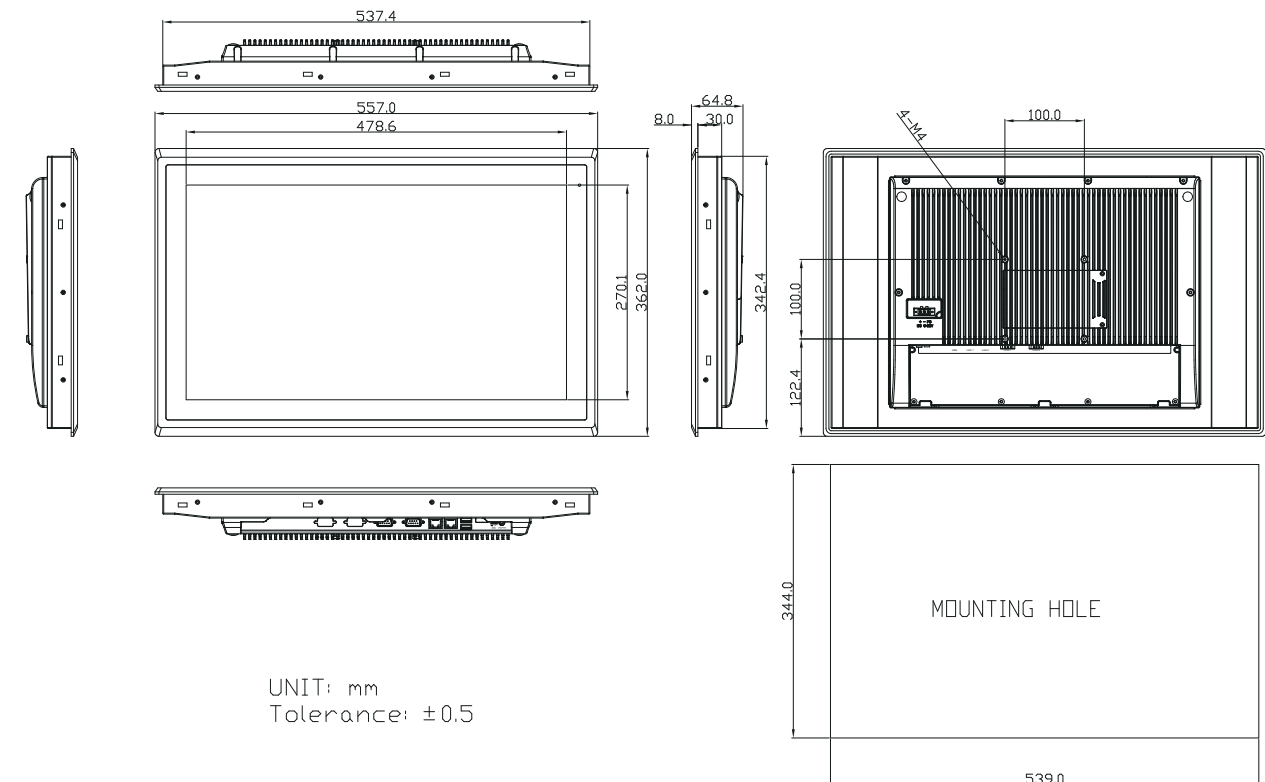
Display	NV-HMI-821(P)	NV-HMI-821(P)H
Display Type	21.5" TFT-LCD	21.5" TFT-LCD
Max. Resolution	1920 x 1080	1920 x 1080
Max. Color	16.7M	16.7M
Luminance (cd/m ²)	250	1000
Viewing Angle	178(H) / 178(V)	178(H) / 178(V)
Contrast Ratio	3000 : 1	3000 : 1
Backlight Lifetime	30,000 Hrs	30,000 Hrs

Touch Screen	
Type	Resistive Touch Window Projected Capacitive Touch (For P Model)
Interface	USB
Light Transmission(%)	Resistive Touch Window: over 80% Projected Capacitive Touch: over 90%

Power	
Power Input	DC 9~36V
Power Consumption	NV-HMI-821: MAX: 26.6W / NV-HMI-821P: MAX: 26.7W NV-HMI-821H: MAX: TBD / NV-HMI-821PH: MAX: TBD



Dimensions



UNIT: mm
Tolerance: ±0.5

Mechanical	
Color	RAL 9007
Construction	Aluminum Die-casting Front Bezel and Chassis
Mounting	Panel Mounting, VESA 100 x 100
IP Rating	IP66 compliant front bezel
Dimensions	557 x 362 x 64.8 mm
Net Weight	NV-HMI-821(P): 7.5 Kg NV-HMI-821(P)H:TBD

Environmental	
Operating Temperature	0~50°C / 0~40°C For 821(P)H
Storage Temperature	-20~60°C
Storage Humidity	10 to 90%@ 40°C, non-condensing
Certificate	CE / FCC CLASS A/ UL

Operating System Support	
Windows Embedded Compact 7, Windows Embedded Standard 7, Windows 7 Pro(FES), Windows 7 Ultimate(FES), Windows Embedded 8 Standard, Windows Embedded 8.1 Industry Pro, Windows 10 IoT Enterprise 2015LTSP	

Ordering Information	
NV-HMI-821-01	21.5" FHD Fanless HMI barebone with Intel Celeron N2930 1.83GHz CPU, 2GB DDR3L RAM, Resistive touch screen, DC 9~36V input with adapter, Aluminum chassis
NV-HMI-821P-01	21.5" FHD Fanless HMI barebone with Intel Celeron N2930 1.83GHz CPU, 2GB DDR3L RAM, Projected capacitive touch screen, DC 9~36V input with adapter, Aluminum chassis
NV-HMI-821H-01	21.5" FHD Fanless HMI barebone with Intel Celeron N2930 1.83GHz CPU, 4GB DDR3L RAM, Resistive touch screen, DC 9~36V input with adapter, Aluminum chassis, High brightness 1,000nits LCD
NV-HMI-821PH-01	21.5" FHD Fanless HMI barebone with Intel Celeron N2930 1.83GHz CPU, 4GB DDR3L RAM, Projected capacitive touch screen, DC 9~36V input with adapter, Aluminum chassis, High brightness 1,000nits LCD