

SP-241C-1N305

Industrial Fanless 23.8" Panel PC w/ Intel® Alder Lake-N Core i3 Processor N-series



Features

- Intel® Alder Lake-N Core i3-N305 Processor (8 cores, up to 3.8GHz)
- 23.8" FHD LCD with LED backlight, front panel support IP66
- Industrial-grade 10 points project capacitive touch screen
- 1 x DDR5 4800MHz SO-DIMM Slot, up to 16GB
- Support 2 x 2.5 GbE LAN
- Wide voltage 10~36V DC-IN, lockable Phoenix connector
- Support remote ON-OFF
- Grounding protection for product shell
- Support 1 x 2.5 inches HDD/SSD expansion
- Support standard VESA and panel mount
- Support Over-Voltage & Reversed Power Insertion Protection



HDMI



Over-voltage
Protection



USB 3.2



-10~60°C



Wide Voltage
Range



Reversed
Power Insertion
Protection

System

CPU	Intel® Core™ i3-N305 Processor (6M Cache, 8 Cores, UP to 3.8GHz)
Memory	1 x DDR5 SO-DIMM socket, supporting 4800 MHz SDRAM up to 16GB
Chipset	Integrated in CPU
Graphics	Integrated Intel® UHD Graphics
LAN Chipset	2 x Intel® i226-V 2.5 GbE controllers
Watchdog Timer	1~255 levels reset

Storage

Device	1 x M.2 M key 2242/2280 slot (SATA signal)
	1 x M.2 M key 2242/2280 slot (PCIe x4 NVMe signal) (OEM Request)
	1 x SATA 3.0 (2.5" HDD/SSD drive bay)
	*CTOS is available

Audio

Type	1 x Audio (Line-out & Mic-in 2 in 1) (Chipset ALC888S)
Speaker	2 x 4Ω 3W speaker

LCD Display

Size/Type	23.8" TFT LCD Panel
Max. Resolution	1920(H) x 1080(V)
Ratio	16:9
Luminance	250 nits
Contrast Ratio	3000:1
Backlight Type	LED
Backlight Lifetime	30,000 Hrs
Touch Type	10 points project capacitive touch screen
Touch	35,000,000 times
View Angle	CR ≥ 10, 178°(H) / 178°(V)

Power System

Power Input	10~36V DC, 2-pin Phoenix connector
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OS

Windows 10/11, Ubuntu 22.04

Note for M.2 M key 2242/2280 slot (PCIe x4 NVMe signal) (OEM Request): When OEM Request is executed, M.2 SATA & 2.5" SATA are disabled.

Qualification

Certification	CE, FCC
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External I/O

Serial Ports	1 x RS232/422/485(COM1) with DB9
	1 x RS232(default)/485(Jumper)(COM2) with DB9
	1 x RS232(COM3) with DB9
USB Ports	2 x USB3.2 2 x USB2.0
LAN	2 x RJ45
Video Ports	1 x HDMI (Max Resolution: 4096x2160@60Hz)
Remote On-Off	1 x Remote On/Off Switch

Internal I/O

Expansion	1 x M.2 E-key 2230 (PCIe x1/USB 2.0 signal) support CNVi
	1 x 8bit GPIO 3.3V(jumper)/5V(default)
	Power voltage (optional)
	2 x RS232 (optional)

Mechanical

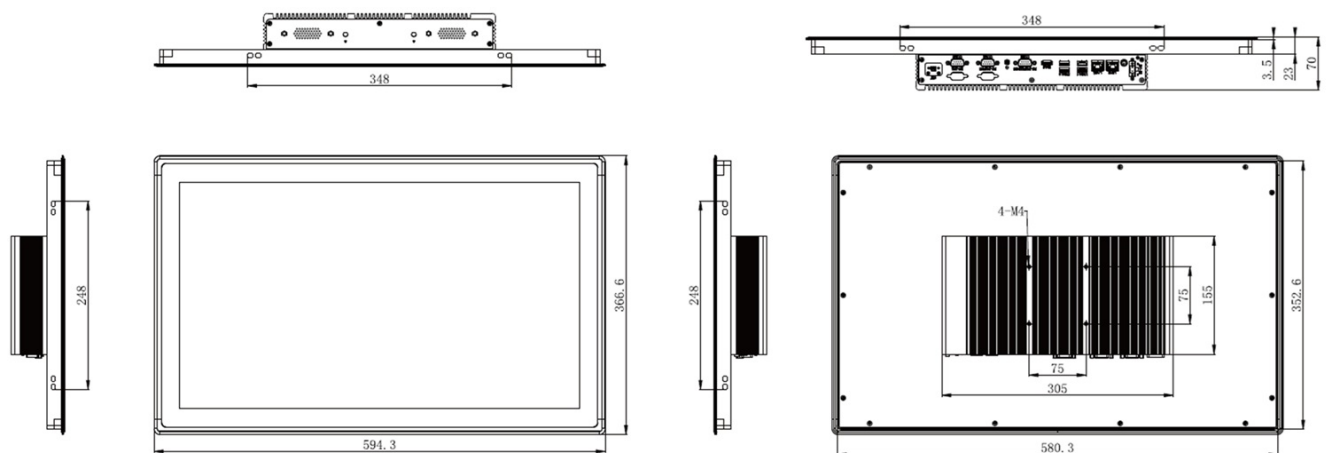
Front Panel	Aluminum alloy
Heat-Sink	Aluminum alloy
Rear Cover	SECC
Power Button	1 x Power button w/LED
Dimension (W x H x D)	594.3(W) x 366.6(H) x 70(D) mm
Cut out	581.3 x 353.6 mm
Mounting	Panel mount, Wall mount and VESA-mount (75 x 75 mm)
Weight	8.2kg
Ingress Protection	Front panel IP66

Environmental

Operating Temp.	-10 ~ 60°C (14 ~ 140°F), ambient w/ air flow (WT RAM & SSD)
Storage Temp.	-40 ~ 70°C (-40 ~ 158°F)
Operating Humidity	5 ~ 95% @40°C (non-condensing)
Vibration	5~500Hz, 2Grms operation
Shock	Operation: 10G@11ms Non-operation: 30G@11ms

*CTOS means Configure-to-Order Service.

Dimensions



Unit: mm

Packing List

SP-241C-1N305	1 pcs Panel PC
2-pin terminal block	1 pcs 5.0mm for Power-input, 1 pcs 3.5mm for Remote on-off SW
22-pin SATA & Power Cable	250mm, 1 pcs
Thermal Pad	4 pcs for M.2 2242/Memory, 1 pcs for CPU
Panel Hook	4 pcs per bag, 2 bags in total
Screw Package	1 pcs

Ordering Information

SP-241C-1N305	23.8"(16:9) Panel PC with Intel® Core™ i3-N305 processor, HDMI*1, USB*4, LAN*2, COM*5, DC10~36V power input
SP-241C-1N305-R8S128	23.8"(16:9) Panel PC with commercial 8GB RAM & 128GB SSD, Intel® Core™ i3-N305 processor, HDMI*1, USB*4, LAN*2, COM*5, DC10~36V power input
PAC-120W-FSP-SPA-US R1.0	AC/DC Adapter Kit (w/ UKCA), 19V, 120W, 2 WIRE w/ US POWER CORD
PAC-120W-FSP-SPA-EU R1.0	AC/DC Adapter Kit (w/ UKCA), 19V, 120W, 2 WIRE w/ EU POWER CORD
PAC-120W-FSP-SPA-UK R1.0	AC/DC Adapter Kit (w/ UKCA), 19V, 120W, 2 WIRE w/ UK POWER CORD
PAC-120W-FSP-SPA-IN R1.0	AC/DC Adapter Kit (w/ UKCA), 19V, 120W, 2 WIRE w/ IN POWER CORD
PAC-120W-FSP-SPA-JP R1.0	AC/DC Adapter Kit (w/ UKCA), 19V, 120W, 2 WIRE w/ JP POWER CORD
8bit GPIO cable	200mm, DB9M TO HSG2*5P(2.0), 8bit GPIO, W/O BRACKET, W/SCREW
COM4 cable	150+/-10mm, DB9M TO HSG2*5P(2.0), 9-Wire COM4, W/O BRACKET, W/SCREW
COM5 cable	150+/-10mm, DB9M TO HSG2*5P(2.0), 3-Wire COM5, W/O BRACKET, W/SCREW

