

P121-2G Series

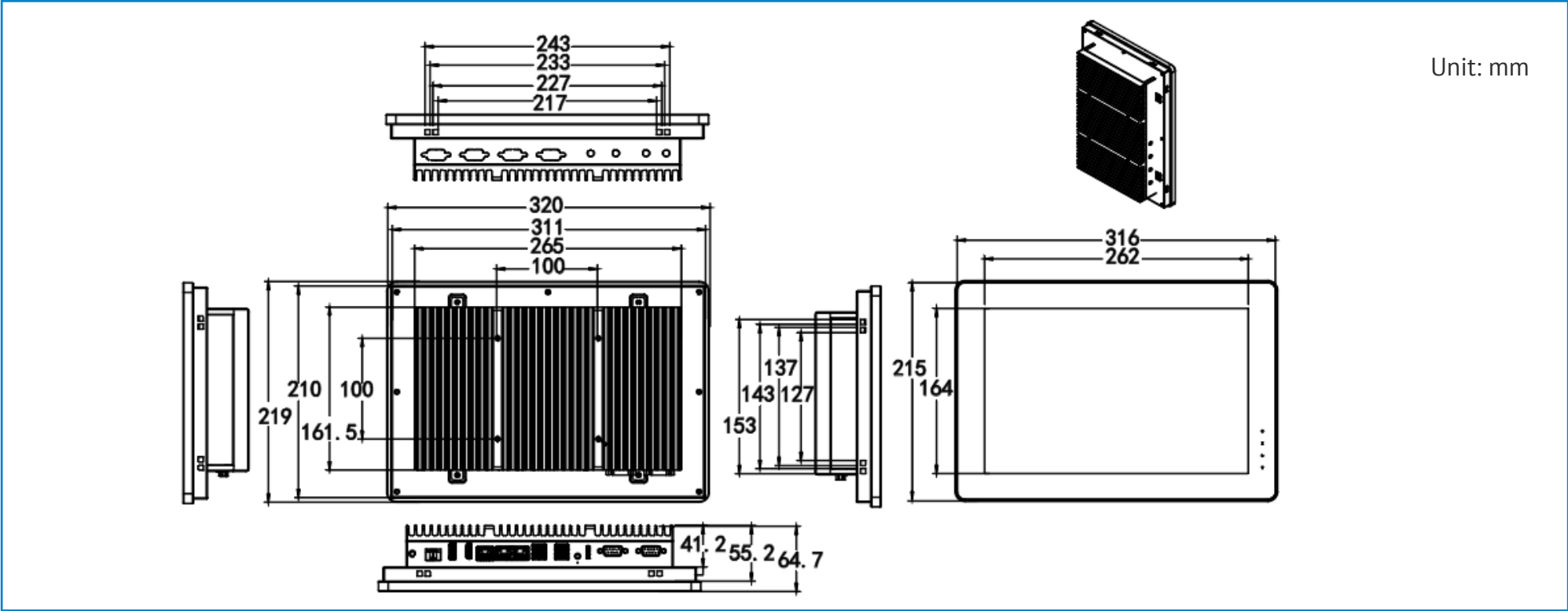


- Product Features
- Industrial-grade 12.1" 1280*800 TFT LCD with 50K backlight lifetime
 - Projected capacitive/5-wire resistive touch control; IP65 rated front panel protection
 - Intel® Alder Lake-N N97 / I3-N305
 - Single channel DDR5 up to 16GB
 - 1DP, 1HDMI
 - 3 LAN (2 x Intel i210, PoE optional; 1 x Realtek RTL8111H)
 - 3 USB 3.0, 1 USB2.0
 - 2COM (1 x RS-232/422/485, 1 x RS-232), supports expansion up to 6COM at most
 - Support 4G/5G, Wi-Fi module expansion
 - DC 9~36V, UPS module (optional)
 - Support VESA/Embedded installation
 - Support 4G/5G, Wi-Fi module expansion
 - Windows 10/11, centos 8, ubuntu 20.04/22.04

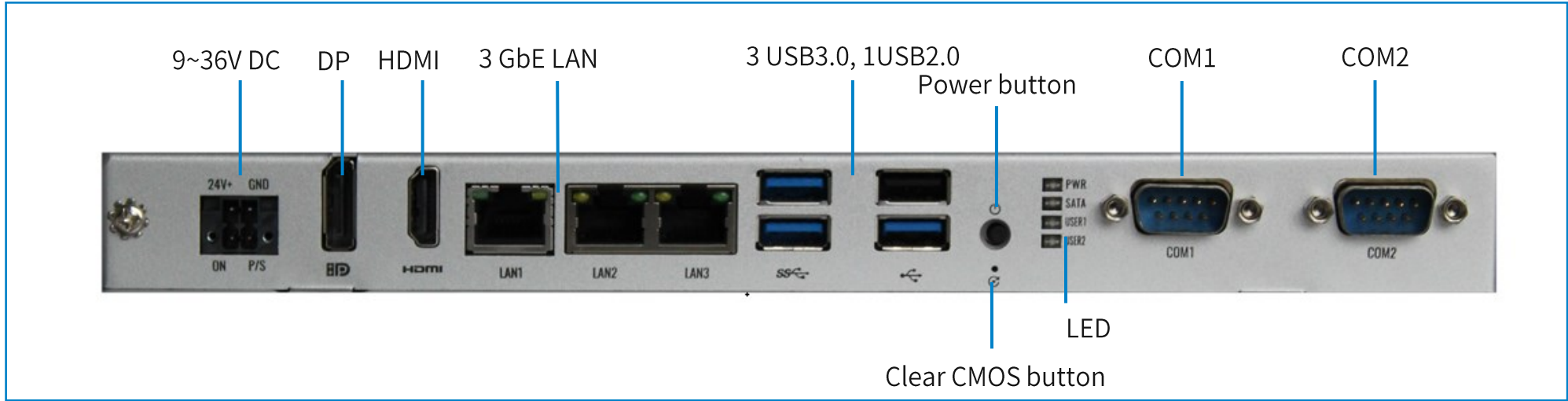
Specifications

Item		Description	
Processor System	CPU	Intel® Alder Lake-N N97 / I3-N305	
	TDP	12W (N97) / 15W (I3-N305)	
	BIOS	AMI 128Mbit SPI Flash	
Memory	Technology	Single channel DDR5 SO-DIMM	
	Max Capacity	16GB	
Graphics	Controller	Intel Gen12 UHD Graphics Engines (SoC integrated)	
	Feature	DX12, Open GL 4.6, Vulkan 1.2	
LCD	Type	WXGA	
	Screen size	12.1" (16:10)	
	Maximum resolution	1280 x 800	
	Maximum color quantity	16.2M	
	Brightness (cd/m²)	400	
	Viewing angle (H/V°)	178°/178°	
	Backlight life	50,000hrs	
	Contrast ratio	800:1	
Touch Screen	Capacitive touch	Light Transmission	≥85%
		Touch	10 points
		Type	Projected Capacitive Multi-touch
	Resistive touch	Lifetime	Single-point touch 10 million times
		Light Transmission	Approximately 78%
		Resolution	Linear
		Type	5-wire resistive
External I/O	DP	1 x DP1.4a resolution up to 4096 x 2304 @ 60Hz	
	HDMI	1 x HDMI2.0b resolution up to 4K x 2K @60Hz	
	Ethernet	2 x Intel i210 GbE LAN (PoE optional), 1 x Realtek RTL8111H GbE LAN	
	USB	3x USB 3.0, 1 x USB 2.0	
	Serial Port	1 x RS-232/422/485, 1 x RS-232 (supports expansion up to 6COM at most)	
	Power input interface	4-pin phoenix terminal, supports remote switch	
Internal I/O	M.2 B-Key	1 x M.2 B-Key 3052 support 4G/5G	
	M.2 E-Key	1 x M.2 E-Key 2230 support Wi-Fi6 (CNVI)	
	M.2 M-Key	1 x M.2 M-Key 2280 support SSD (SATA)	
	SIM	1 x Nano SIM	
LED & Switch	LED Indicator	Power, SATA, User 1, User 2	
	Power Button	1 x Power Button	
	Clear CMOS Button	1 x Clear CMOS Button	
Power Supply	Power Input	DC 9~36V	
	Power management	AT/ATX	
	Max. consumption	30W	
Others	Watchdog	Interrupt, system reset, programmable 1~255 min/sec	
	TPM	TPM 2.0 (Optional)	
Physical Characteristics	Dimension	320 x 219 x 64.7mm (L x W x H)	
	Weight	2.8 kg	
	Installation	VESA/Embedded	
Environment	Operating Temperature	0 ~ 60 °C (32~140°F)	
	Storage Temperature	-40° C ~ 85° C (-40~185° F)	
	Operating Humidity	95% @ 40 °C (Non-condensing)	
	Storage Humidity	95% @ 40 °C (Non-condensing)	
Certification	EMC	CE, FCC	
Operation System	OS	Windows 10/11, centos 8, ubuntu 20.04/22.04	

Dimension



Interface



Ordering Information

Model	Screen size	Screen type	CPU	Maximum requency	TDP	Core/Thread	LAN	COM	USB3.0	USB2.0	DP	Power input
P121-2G-1000	12.1"	1280x800 Capacitive touch-screen	N97	3.60 GHz	12W	4C	3	2	3	1	1	9~36V DC
P121-2G-2000	12.1"	1280x800 Capacitive touch-screen	I3-N305	3.80 GHz	15W	8C/8T	3	2	3	1	1	9~36V DC
P121-2G-R-1000	12.1"	1280x800 Resistive touch-screen	N97	3.60 GHz	12W	4C	3	2	3	1	1	9~36V DC
P121-2G-R-2000	12.1"	1280x800 Resistive touch-screen	I3-N305	3.80 GHz	15W	8C/8T	3	2	3	1	1	9~36V DC

Optional Accessories

Part Number	Description
MF0A000000000057	WIFI+BT module, M.2 2230 CNVi WiFi5 2.4G/5G 2x2 9560
MF0A000000000078	WIFI+BT module, M.2 2230 CNVi WiFi6 2.4G/5G 2x2
MF0A000000000016	5G module, M.2 RM500Q-GL Sub-6 GHz Worldwide (Excluding US)
MF0A000000000042	5G LTE module, M.2 RM520NGLAA-M20-SGASA, Worldwide
MF0A000000000036	4G LTE module, M.2 EM05CEFC-128-SGAS, China
MF0A000000000066	5G LTE module, M.2 RM500UCNVAA-D10-SNADA EMEA, Asia-Pacific
82UPS000000000002	Internal UPS module

OS Support

Part Number	Description
AA0A000000000002	Win10 IoT Ent 2019 LTSC Entry OEM
AA0A000000000003	Win10 IoT Ent 2019 LTSC MultiLang ESD OEI High End
AA0A000000000004	Win10 IoT Ent 2019 LTSC MultiLang ESD OEI Value
AA0A000000000005	Win10 IoT Ent 2021 LTSC Multilang ESD OEI Entry
A087	Win 11
A088	centos 8
A049	ubuntu 20.04
A053	ubuntu 22.04

Packing List

Part Number	Description	Quantity
-	P121-2G Series Panel PC	1
MA0A0600000000005	Accessory Kit for Fixed Hook	1
ZM0A0000000000020	Three-plug power cord	1
ZM0A0000000000061	24V 2.5A power adapter with 4 PIN terminal	1