

P121-2F Series

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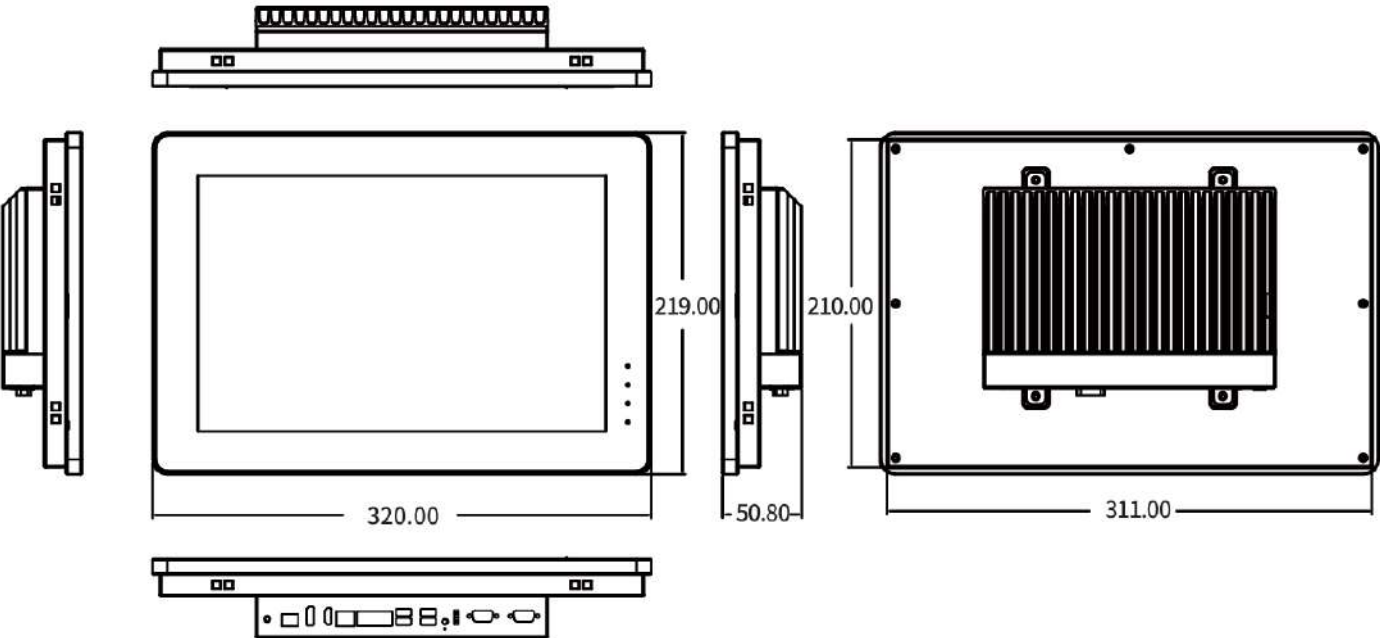
► Product Features

- Industrial grade 12.1 "1280*800 TFT LCD, 50K life, LED backlight
- Full plane with multi-touch projection capacitor
- Intel® Atom® J6412/ N6210/ X6425E
- Dual channel DDR4-3200 up to 32GB memory
- True flat touch screen with IP65 front panel protection
- Supports 4G/5G, Wi-Fi module expansion
- 3 LAN (2 x Intel i210 supports PoE, 1 x Intel i226)
- 2 USB 3.0, 2 USB 2.0
- 1 RS-232/422/485, 1 RS-232
- DC 9-36V, Optional UPS module
- CE/FCC Class B, ESD 8KV/15KV
- Compact fanless design, aluminum alloy front panel and housing ground protection
- Supports VESA/ Embedded installation
- Windows 10/11, Centos 8, Ubuntu 20.04/22.04

► Technical Specifications

X121F Series		
Processor System	CPU	Intel® Atom® J6412 CPU
	TDP	10W
	BIOS	AMI 128Mbit SPI Flash
Graphics	Controller	Intel Gen11 Graphics Engines (SoC integrated)
	Feature	DX12, OGL4.5, OCL1.2, Vulkan 1.1, MPEG2, H.264, JPEG/MJPEG, H.265 (HEVC)
Memory	Technology	2 x DDR4 3200 MT/s
	Max. capacity	32 GB
Storage	M.2 M-Key	1 x M.2 2280 SATA3.0
LCD	Type	WXGA
	Size	12.1" (16:10)
	Max. Resolution	1280 x 800
	Max. Color	16.2M
	Brightness cd/m²	400
	View Angle (H/V°)	178°/178°
	Backlight life	50,000 hrs
	Contrast Ratio	1000: 1
Screen	Capacitive Touch	Light transmittance ≥82%
		Contact 10-point
		Type Projective capacitance
External I/O	DP	1 x DP1.4, resolution up to 4096 x 2160@60Hz
	Ethernet	3 LAN (2 x Intel i210 supports PoE, 1 x Intel i226)
	USB	2 x USB 3.0, 2 x USB2.0
	Serial Port (Optional)	1 RS-232/422/485, 1 RS-232
	Power Connector	4-pin Phoenix terminal, supports remote switch
LED & Switch	LED Indicator	Power, SATA, User-defined 1, User-defined 2
	Power Button	1 x Power Button
	Reset	1 x Reset
Inside Connectors	M.2 E-Key	1 x M.2 2230 supports Wi-Fi (Supports PCIe protocol)
	M.2 B-Key	1 x M.2 3052 supports 4G/5G
	SIM	1 x Nano SIM
	UPS	1 x UPS (Optional)
Power Supply	Power Input	DC 9-36V ±10%
	Max. Consumption	30W
	Power Management	AT/ATX
Others	Watchdog	Interruption and system reset are programmable for 1 to 255 min/sec
	TPM	TPM 2.0 (Optional)
Environment	Operating Temperature	0 to 60 °C(32 to 140°F)
	Storage Temperature	-40°C to 85°C(-40 to 185°F)
	Operating Humidity	95% @ 40 °C (Non-condensing)
	Storage Humidity	95% @ 60 °C (Non-condensing)
Physical characteristics	Dimension	320 x 219 x 50.8 mm (L x W x H)
	Weight	2.8 kg
	Installation	VESA/Embedded
Certification	EMC	CE, FCC
OS	OS	Windows 10/11, Centos 8, Ubuntu 20.04/22.04

► Product Dimension



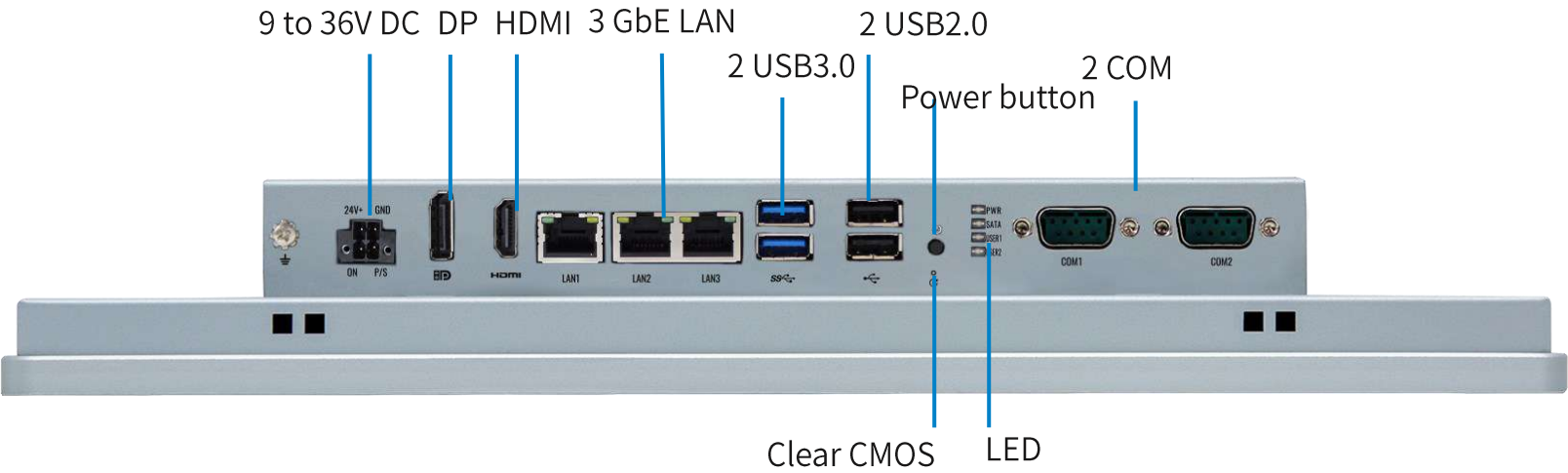
► Ordering Information

Model	Screen Size	Screen Type	CPU	TDP	Turbo Frequency	Core/Thread	LAN	USB3.0	USB2.0	COM	DP	Power Supply
P121F-2000	12.1"	Capacitive touch	Celeron-J6412	10W	2.60 GHz	4C/4T	3(Optional 2 PoE)	2	2	2	1	9 to 36V DC
P121F-2001	12.1"	Capacitive touch	Celeron-N6210	6.5W	3.00 GHz	2C/2T	3(Optional 2 PoE)	2	2	2	1	9 to 36V DC
P121F-2002	12.1"	Capacitive touch	X6425E	12W	3.00 GHz	4C/4T	3(Optional 2 PoE)	2	2	2	1	9 to 36V DC
P121F-2003	12.1"	1280x800 Resistive Touch	J6412	2.60 GHz	10W	4C/4T	3(Optional 2 PoE)	2	2	2	1	9 to 36V DC

► Optional Accessories

Part Number	Description
-	Wi-Fi+BT module, M.2 2230 WIFI6 2T2R AW-XB547NF
MF0A000000000016	5G module, M.2 RM500Q-GL Sub-6GHz Worldwide (Excluding the US)
MF0A000000000042	5G LTE module, M.2 RM520NGLAA-M20-SGASA, Worldwide
MF0A000000000066	5G LTE module, M.2 RM500UCNVAA-D10-SNADA EMEA, Asia-Pacific
MF0A000000000036	4G LTE module, M.2 EM05CEFC-128-SGAS, China
82UPS000000000002	Internal UPS module

► Product Interfaces



► Packing List

Part Number	Description	Quantity
-	P121-2F Series All-in-One PC	1
MC0A000000000019	All-in-one fixed hook accessories set	1
ZM0A000000000020	Three-plug power cord	1
ZM0A000000000058	24V 2.5A power adaptor with 4-pin Phoenix terminal	1