

M1120 Series

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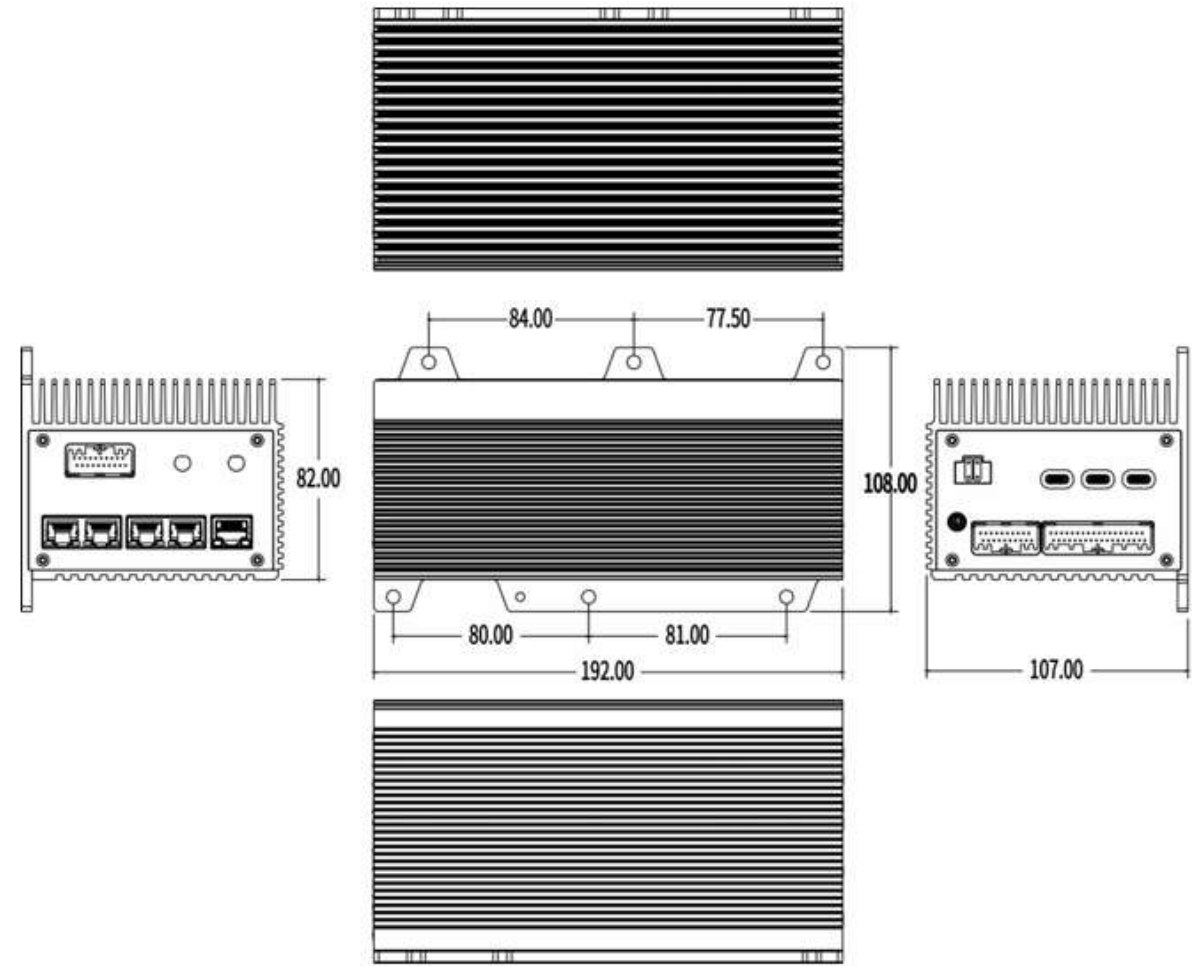
► Product Features

- Intel® 12th generation Core™ i3/ i5/ i7 CPU
- Dual channel DDR4-3200, Max. 64GB memory
- 3 USB Type-C (1 supports DP function)
- 4 GbE LAN (4 x Intel i210)
- 1 RS-232/422/485, 2 RS-232, 3 RS-485
- 24 DI, 20 DO
- 2 CANBus, 2 Encode
- Supports 4G/5G, Wi-Fi module expansion
- DC 9 to 36V, Optional UPS module
- Modular and cable-free high reliability design
- 192 x 107 x 82 mm (L x W x H)
- Windows 10/11, Centos 8, Ubuntu 20.04/22.04

► Technical Specifications

M1120 Series							
Processor System	CPU	i3-1215U	i5-1245U	i7-1265U	i3-1220P	i5-1250P	i7-1270P
	Core/Thread	6C/8T	10C/12T	10C/12T	10C/12T	12C/16T	12C/16T
	Turbo Frequency	4.40 GHz	4.40 GHz	4.80 GHz	4.40 GHz	4.40 GHz	4.80 GHz
	TDP	15W	15W	15W	28W	28W	28W
Graphics	Controller	Intel® Iris XeGraphics architecture with up to 96 Eus					
	Feature	8K60 12b 4:2:0 HEVC/VP9/SCC, 8K30 10b 4:2:0 AV1, 5K60 10b 4:4:4 HEVC/VP9/SCC, 4K60 8b 4:2:0 AVC					
Memory	Technology	2 x DDR4 3200 MT/s					
	Max. Capacity	64 GB					
Storage	M.2 M-Key	2 x M.2 2280 B/M-Key SATA3.0					
External I/O	Ethernet	4 x Intel i210 GbE LAN					
	USB	3 x USB Type-C (1 supports DP function)					
	Serial Port	1 x RS-232/422/485, 2 RS-232, 3 x RS-485					
	DIO	24 DI, 20 DO					
	CAN	2 x CANBus (RJ45)					
	Encoder	2 x Encode					
	Audio	1 x Line-Out/Mic-In					
	Power Connector	4-pin Phoenix terminal, supports remote switch					
	M.2 E-Key	1 x M.2 2230 supports Wi-Fi					
	M.2 B-Key	1 x M.2 3052 supports 4G/5G					
Inside Connectors	IMU	1 x IMU					
	SIM	1 x Nano SIM					
	MIPI	4 x 4 LAN MIPI					
	UPS	1 x UPS (Optional)					
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Power Supply	Power supply	DC 9-36V					
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	192 x 107 x 82 mm (L x W x H)					
OS	OS	Windows 10/11, Centos 8, Ubuntu 20.04/22.04					

► Product Dimension



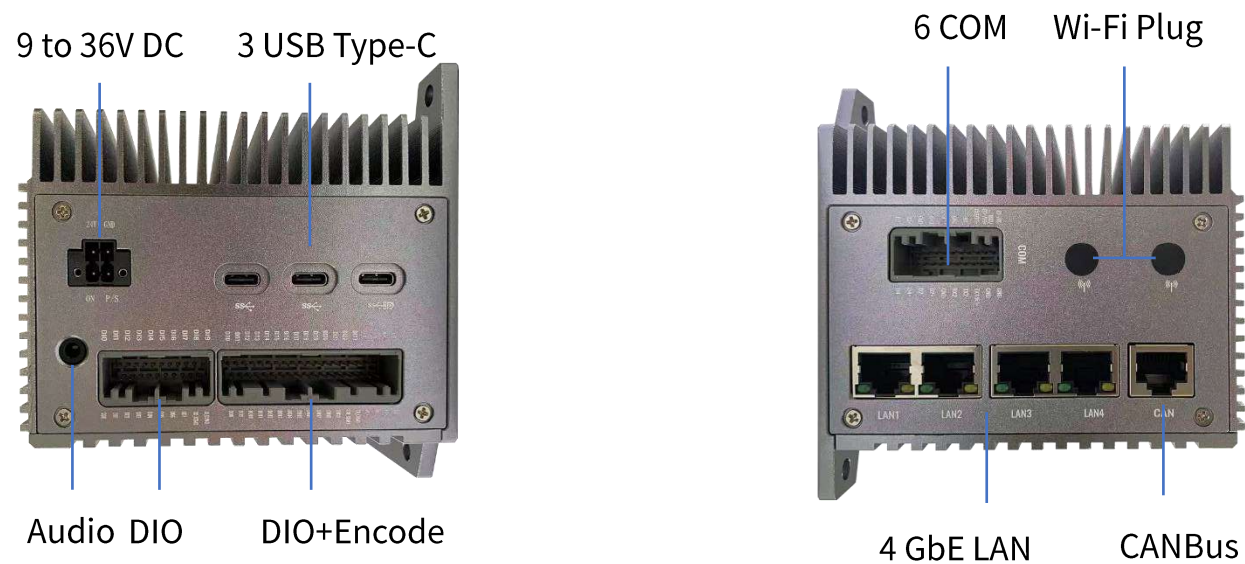
► Ordering Information

Model	CPU	TDP	Turbo Frequency	Core/Thread	LAN	USB Type-C	COM	DI	DO	CAN	Encode	Power
M1120-01	i3-1215U	15W	4.40 GHz	6C/8T	4	3	6	24	20	2	2	9 to 36V DC
M1120-02	i5-1245U	15W	4.40 GHz	10C/12T	4	3	6	24	20	2	2	9 to 36V DC
M1120-03	i7-1265U	15W	4.80 GHz	10C/12T	4	3	6	24	20	2	2	9 to 36V DC
M1120-04	i3-1220P	28W	4.40 GHz	10C/12T	4	3	6	24	20	2	2	9 to 36V DC
M1120-05	i5-1250P	28W	4.40 GHz	12C/16T	4	3	6	24	20	2	2	9 to 36V DC
M1120-06	i7-1270P	28W	4.80 GHz	12C/16T	4	3	6	24	20	2	2	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
-	M1120 Series AMR Controller	1
ZM0A000000000020	Three-plug power cord	1
ZM0A000000000028	Power adaptor with 4-pin Phoenix terminal	1