

MERA-3100 Series

Intel® 9th / 8th Gen Core™ i7/i5/i3 Compact Fanless Box PC



Applications

- Rugged Embedded
- Factory Automation
- Machine Vision
- Surveillance / Video Analytics
- IoT Gateway

Features

- Supports Intel® 9th / 8th Gen Core™ 35W LGA 1151 CPU
- IEEE 802.3at PoE+, up to 25.5W DC Power to Device
- GbE Supports Wake-on-LAN and PXE
- Cable-free and Jumper-less Design to Enhance Reliability
- Supports VGA, DVI, and DP
- Multiple Storage Capability (HDD, mSATA / CFast)
- 9~48V DC Input with Power Ignition Function
- -40°C ~ 70°C Wide Operating Temperature

Ordering Information

| Part No. | Description |
|-----------|--|
| MERA-3100 | Intel® 9 th /8 th Core™ i LGA1151 CPU, Q370 Fanless Box PC, 6 x USB3.0, 2 x USB2.0, 6 x RS232/422/485, 3 x GbE, 1 x DP, 1 x VGA, 1 x DVI-D, 1 x Flexible I/O Window Slot, 1x Removable 2.5" SATA HDD Bay, 1 x Internal 2.5" SATA HDD Bay, DC 9~48V, Terminal Block Connector |
| MERA-3110 | Intel® 9 th /8 th Core™ i LGA1151 CPU, Q370 Fanless Box PC, 6 x USB3.0, 2 x USB2.0, 6 x RS232/422/485, 3 x GbE, 1 x DP, 1 x VGA, 1 x DVI-D, 2 x Flexible I/O Window Slots, 4 x Removable 2.5" SATA HDD Bays, DC 9~48V, Terminal Block Connector |

Packing List

Description

- 1 x MERA-3100 / MERA-3110
- 1 x Wall Mount Kit

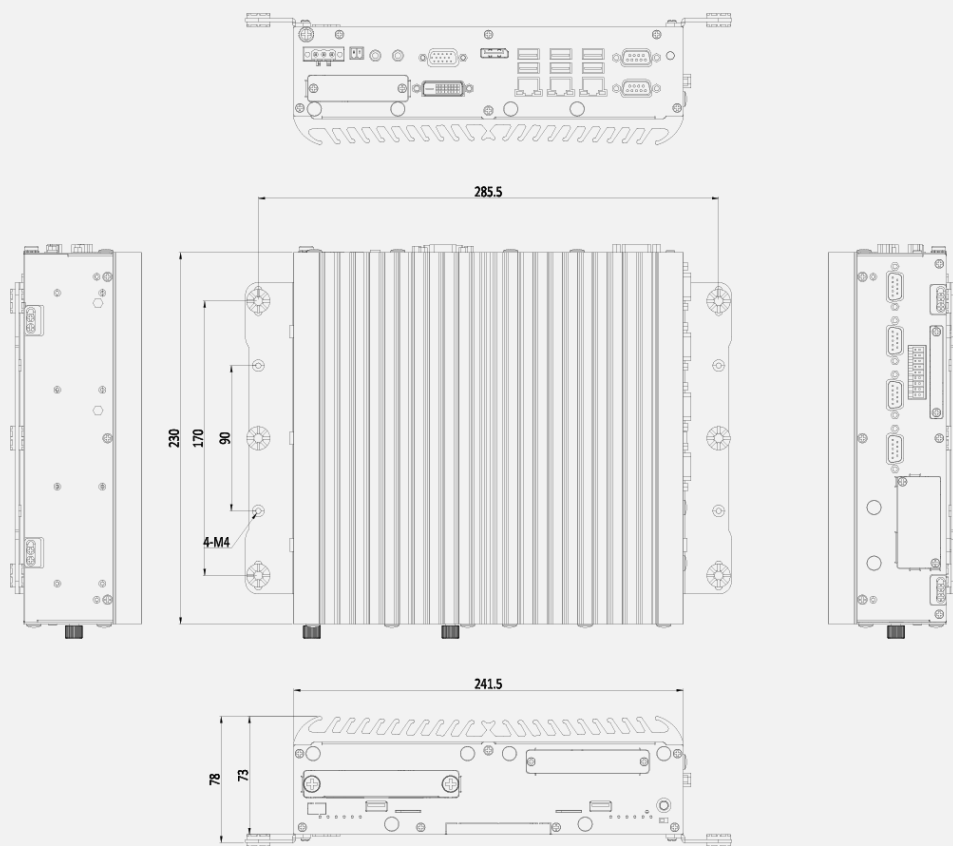
Optional Items

| Part No. | Description |
|------------------------|---|
| AWD-4G003 | 4G(LTE) EG25-G + 2 Antennas, Full Size (for Global) |
| AWD-4G004 | 4G(LTE) EC25EFA + 2 Antennas, Full Size (for Europe/Taiwan/China/Hong Kong) |
| AWD-WF003 | Wi-Fi 802.11 a/b/g/n/ac/BT4.0 (2T2R) + 2 Antennas (Dual Band), Half Size |
| i7-9700TE | Intel® Core™ i7-9700TE (8-core, up to 3.8 GHz, 35W TDP) |
| i5-9500TE | Intel® Core™ i5-9500TE (6-core, up to 3.6 GHz, 35W TDP) |
| i7-8700T | Intel® Core™ i7-8700T (6-core, up to 4.0 GHz, 35W TDP) |
| i5-8500T | Intel® Core™ i5-8500T (6-core, up to 3.5 GHz, 35W TDP) |
| i3-8100T | Intel® Core™ i3-8100T (4-core, up to 3.1 GHz, 35W TDP) |
| 55000-0023-M5 | Adapter AC/DC 24V 5A 120W with 3-pin Terminal Block Plug 5.0mm Pitch |
| 55000-0024-M5 | Adapter AC/DC 24V 9.2A 220W with 3-pin Terminal Block Plug 5.0mm Pitch |
| 30100-0003-CA | Power Cord, 3-pin US Type, 180 cm |
| 30101-0005-CA | Power Cord, 3-pin EU Type, 180 cm |
| 5E400-0004-AV | External Fan Module Kit for MEVA (MERA) Series (92 x 92 x 25 mm) |
| EA-VA3110x-4LANxx-0010 | Internal 4LAN Module Kits for MEVA-3110/MERA-3110 |
| EA-VA3110x-4LAPOE-0010 | Internal 4LANPOE Module Kits for MEVA-3110/MERA-3110 |
| EA-VA3110x-4LM12x-0010 | Internal 4LAN M12 Module Kits for MEVA-3110/MERA-3110 |
| EA-VA3110x-4LMPOE-0010 | Internal 4LANPOE M12 Module Kits for MEVA-3110/MERA-3110 |

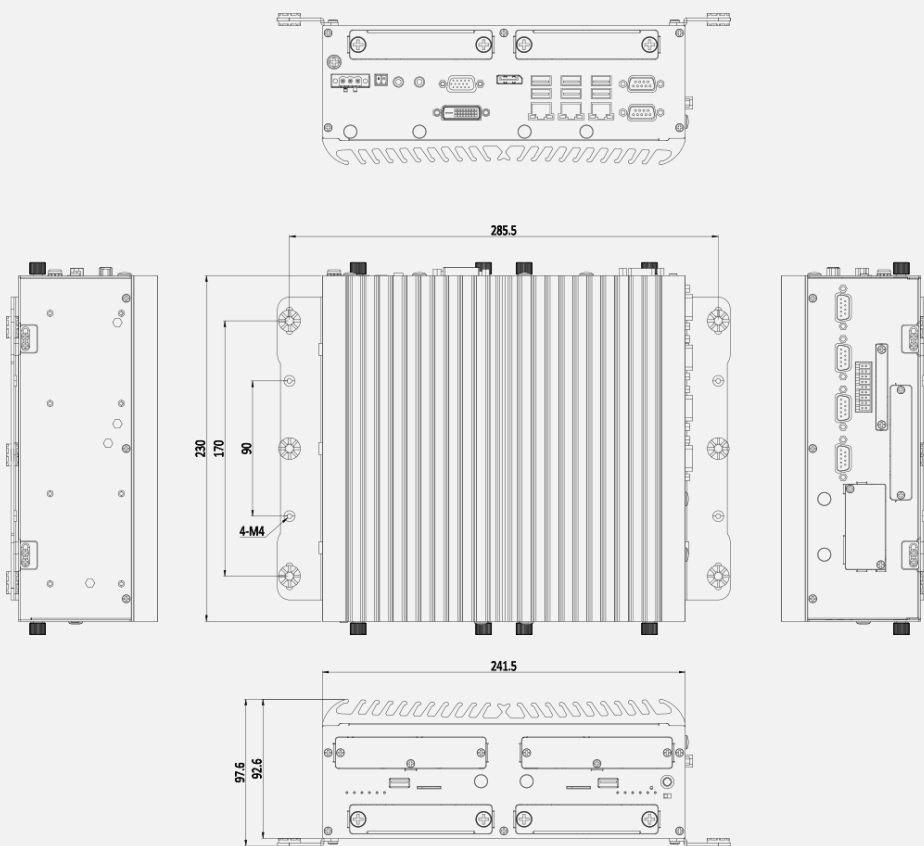
Specifications

| Model | | MERA-3100 | MERA-3110 |
|------------------|--------------------------|---|--|
| Processor System | CPU | Intel® 9 th / 8 th Gen Core™/Pentium®/Celeron® 35W LGA 1151 Processors | |
| | System Chipset | Intel® Q370 | |
| | BIOS | AMI 256 Mbit SPI Flash | |
| | TPM | FTPM 2.0 | |
| Memory | Technology | Dual Channel DDR4 2400/2666 (Unbuffered and Non-ECC) | |
| | Max. Capacity | 64GB | |
| | Socket Type | 2 x 260-pin SO-DIMM | |
| Display | Graphics Engine | Core™ i7/i5/i3: Intel® UHD Graphics 630 Pentium®/ Celeron®: Intel® UHD Graphics 610 | |
| | Multiple Display | 3 | |
| | VGA | 1 x VGA, Max Resolution 1920 x 1200 | |
| | DP | 1 x DP, Max solution 4096 x 2160 | |
| | DVI-D | 1 x DVI-D, Max Resolution 1920 x 1200 | |
| | USB | 6 x USB3.2 and 2 x USB2.0 | |
| | Serial Port | 6 x RS232/422/485 | |
| I/O Interface | Ethernet | 1 x GbE Intel® i219-LM, RJ45 2 x GbE Intel® i210-AT, RJ45 | 1 x GbE Intel® i219-LM, RJ45 2 x GbE Intel® i210-AT, RJ45 4 x GbE Intel® i350-AM4 (Optional, via Arestech Flexible I/O Window) |
| | PoE+ | N/A | 4 x PoE+ Intel® i350-AM4 (Optional, via Arestech Flexible I/O Window) |
| | Audio | 1 x Line-out, 1 x Mic-in | |
| | GPIO/DIO | 8 x Isolated DI and 8x Isolated DO, 2 x 9-pin Terminal Block | |
| | Antenna Hole | 12 | 8 |
| | CMOS Battery | 1 x CMOS Battery and 1 x Clear CMOS Switch | |
| | Flexible I/O Window Slot | 1 | 2 |
| | Storage | 2.5" HDD / SSD | 1 x Removable and 1 x Internal |
| mSATA | | 2 x mSATA (Shared by 2 x CFast) | |
| CFast | | 2x CFast Sockets (Shared by 2 x mSATA) | |
| RAID | | RAID 0, 1, 5, 10 | |
| Expansion | Mini-PCIe | 1 x Full-size Mini-PCIe Sockets (PCIe & USB2.0 and SIM) 1 x Full-size Mini-PCIe Sockets (PCIe & SATA and SIM) (mux with mSATA) | |
| | PCI / PCIe | N/A | |
| | SIM Holder | 2 x Mini-SIM Holder | |
| Power | Power Mode | AT / ATX | |
| | Power Supply Voltage | 9~48V DC with Ignition Control | |
| | Power Connector Type | 1 x 3-pin Terminal Block Connector | |
| | Protection | Over Voltage Protection (OVP) up to 52V Over Current Protection (OCP) 20A Reverse Voltage Protection (RVP) up to -48V | |
| Mounting | Car Mode | 1 x PC/Car Mode Switch 1 x Delay Time Switch | |
| | Type | Wall Mount (Additional Mounting Kit) | |
| Environment | Operating Temperature | -40 ~ 70°C | |
| | Storage Temperature | -40 ~ 85°C | |
| | Humidity | 10% ~ 95% (Non-condensing) | |
| | Vibration | IEC 60068-2-64: 5Grms, random, 5~500 Hz, 1hr/axis | |
| | Shock | IEC 60068-2-27: 50G, half-sine, 11ms duration | |
| General | Certification | CE/FCC Class A | |
| | Thermal Dissipation | Fanless for 35W CPU | |
| | Material | Extruded Aluminum with Heavy Duty Metal | |
| | Dimensions (W x D x H) | 241.5 x 73 x 230mm | 241.5 x 92.6 x 230mm |
| | Net Weight | 3.3kg | 3.95kg |
| | Operating System | Windows 10 IoT, Windows 11 (IoT/Professional), Linux | |

Dimensions MERA-3100



Dimensions MERA-3110



Viewing MERA-3100

1 x Flexible I/O Window Slot



Viewing MERA-3110

