

# MERA-2000 Series

**Arestech**

Rugged Box PC with Intel® Atom or Celeron® Processor



## Features

- Intel® Celeron® Processor J1900, up to 2.42GHz
- Dual Displays Supported by DVI-I and DisplayPort
- 1x DDR3L 1066/ 1333MHz SO-DIMM. Max up to 8GB
- 2x Intel i210-AT GbE Ports, Support Wake-on-LAN and PXE
- 2x Full-size Mini-PCIe, 2x SIM Sockets
- 9~48V DC Input with Built-in Ignition Power Control
- -40°C ~ 70°C Wide Temperature Operation

## Applications

- Digital Signage Control Systems
- Factory Automation Applications
- Image Processing (e.g. Medical 2D and 3D imaging)
- Gaming and Entertainment Industries
- Network Communications

## → Packing List

| Description                  |
|------------------------------|
| 1 x MERA-2000 Series Machine |
| 1 x DVI to VGA Adapter       |
| 1 x Wall Mount Kit           |

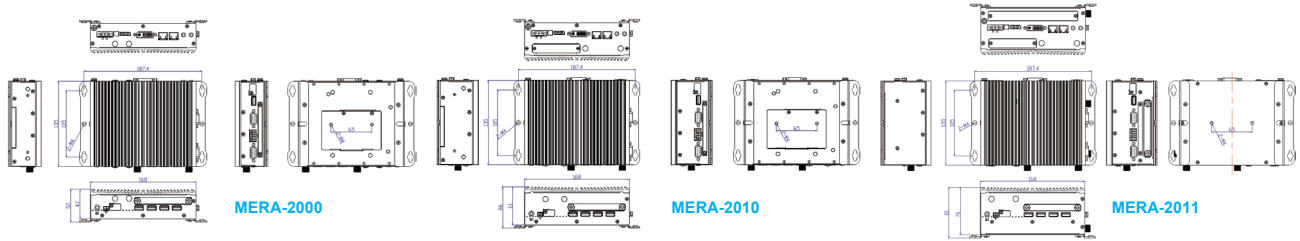
## → Optional Items

| Part No.      | Description                                                                     |
|---------------|---------------------------------------------------------------------------------|
| AWD-4G003     | 4G(LTE) EG25-G+ 2 antenna, Full size (for global)                               |
| AWD-WF001     | Wi-Fi 802.11 bgn (1T1R) +1 Antenna (Single band), Half-size mini PCIe           |
| AWD-WF003     | Wi-Fi 802.11 a/b/g/n/ac/BT4.0 (2T2R)+ 2 antenna(dual band), mini PCIe Half size |
| 2107-2330-X10 | DIN-RAIL Mount Kit                                                              |
| 55000-0025-M5 | Adapter 12V/ 5A 60W                                                             |
| 30100-0003-CA | Power Cord, 3-pin US Type, 180cm                                                |
| 30101-0005-CA | Power Cord, European Type, 180 cm                                               |

## → Ordering Information

| Part No.  | Description                                                                                                                                                                  |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MERA-2000 | Intel® J1900 Compact fanless box pc with 2x LAN, 1x USB 3.0, 4x USB2.0, 2x RS232/422/485, 1x DVI-I, 1x DP, Lin out, Mic in, 1x Removable 2.5" SATA HDD Bay                   |
| MERA-2010 | Intel® J1900 Rugged Box PC with 2x LAN, 1x USB 3.0, 4x USB2.0, 2x RS232/422/485, 1x DVI-I, 1x DP, Lin out, Mic in, 1x Universal I/O Bracket, 1x Removable 2.5" SATA HDD Bay  |
| MERA-2011 | Intel® J1900 Rugged Box PC with 2x LAN, 1x USB 3.0, 4x USB2.0, 2x RS232/422/485, 1x DVI-I, 1x DP, Lin out, Mic in, 1x Universal I/O Bracket, 2x Removable 2.5" SATA HDD Bays |

## → Dimensions



## → Specifications

| Model            |                          | MERA-2000                                                                                                                   | MERA-2010                                    | MERA-2011                                    |
|------------------|--------------------------|-----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|----------------------------------------------|
| Processor System | CPU                      | Intel® Celeron® Processor J1900                                                                                             |                                              |                                              |
|                  | System Chipset           | N/A                                                                                                                         |                                              |                                              |
|                  | BIOS                     | AMI BIOS, 64Mbit SPI Flash ROM Built on Board                                                                               |                                              |                                              |
| Memory           | Technology               | Single Channel DDR3L 1066/1333 MHz SO-DIMM                                                                                  |                                              |                                              |
|                  | Max. Capacity            | 8 GB (un-buffered and non-ECC)                                                                                              |                                              |                                              |
|                  | Socket                   | 1 x DDR3L 204-pin SO-DIMM                                                                                                   |                                              |                                              |
| Display          | Graphics Engine          | Integrated Intel® HD Graphics                                                                                               |                                              |                                              |
|                  | VGA                      | N/A                                                                                                                         |                                              |                                              |
|                  | DVI-D                    | 1 x DVI-I (DVI-D+VGA), Resolution 1920*1200                                                                                 |                                              |                                              |
|                  | HDMI                     | N/A                                                                                                                         |                                              |                                              |
|                  | Display Port             | 1 x DP (3840*2160)                                                                                                          |                                              |                                              |
|                  | Multi Display            | Yes                                                                                                                         |                                              |                                              |
| I/O Interface    | USB                      | 5 (1 x USB3.0, 4 x USB2.0)                                                                                                  |                                              |                                              |
|                  | Serial                   | 2 x COM (RS-232/422/485), with Auto Flow Control, DB9                                                                       |                                              |                                              |
|                  | GPIO                     | 4 x Isolated DI and 4 x Isolated DO Port, 10-Pin Terminal Block                                                             |                                              |                                              |
|                  | Ethernet                 | 2 x GbE (2 x Intel® i210-AT GbE LAN Ports, Supporting Wake-on-LAN and PXE)                                                  |                                              |                                              |
|                  | Audio                    | Lin out, Mic in                                                                                                             |                                              |                                              |
|                  | CMOS Battery             | 1 x External Clear CMOS Switch                                                                                              |                                              |                                              |
|                  | Universal I/O Bracket    | N/A                                                                                                                         | 1 x Universal I/O Bracket                    | 1 x Universal I/O Bracket                    |
| Expansion        | miniPCIe/ M.2 Slot       | 1 x Full-size Mini-PCIe Socket (mux with mSATA), 1 x Full-size Mini-PCIe                                                    |                                              |                                              |
|                  | SIM Socket               | 2 x External SIM Socket                                                                                                     |                                              |                                              |
|                  | Antenna Hole             | 6 x Antenna Holes                                                                                                           | 4 x Antenna Holes                            | 4 x Antenna Holes                            |
|                  | PCI/ PCIe Slot           | N/A                                                                                                                         |                                              |                                              |
| Storage          | HDD/SSD                  | 1 x Removable 2.5" SATA HDD Bay                                                                                             | 1 x Removable 2.5" SATA HDD Bay              | 2 x Removable 2.5" SATA HDD bay              |
|                  | RAID                     | N/A                                                                                                                         |                                              |                                              |
|                  | CFast Socket             | 1 x CFast Socket (Shared by mSATA)                                                                                          |                                              |                                              |
|                  | mSATA/M.2                | 1 x mSATA Socket (Shared by 1 x Mini-PCIe and CFast)                                                                        |                                              |                                              |
| Power            | Power On Model           | AT/ATX                                                                                                                      |                                              |                                              |
|                  | Power Supply Voltage     | Power Supply: 9~48V DC (Power Ignition Sensing)                                                                             |                                              |                                              |
|                  | Power Connector Type     | 1 x 3-pin Terminal Block Connector                                                                                          |                                              |                                              |
|                  | Power Consumption (Max.) | Max: 1.66A @ 12 V (20W)                                                                                                     |                                              |                                              |
|                  | Battery                  | CR2032; 3.3V                                                                                                                |                                              |                                              |
|                  | Power Connector Type     | 1 x AT/ATX Mode Switch                                                                                                      |                                              |                                              |
|                  | Protection               | Over Voltage Protection (OVP) Up to 52V<br>Reverse Voltage Protection (RVP) up to -48V<br>Over Current Protection (OCP) 20A |                                              |                                              |
| Mounting         | Car Mode                 | 1 x PC/Car Mode Switch                                                                                                      |                                              |                                              |
|                  | Type                     | Wall Mounting/DIN-Rail Mounting (Optional)                                                                                  |                                              |                                              |
| Environment      | Operating Temperature    | -40°C to 70°C (with Industrial Grade Peripherals)                                                                           |                                              |                                              |
|                  | Storage Temperature      | -40°C to 80°C                                                                                                               |                                              |                                              |
|                  | Humidity                 | 10%~95% (Non-condensing)                                                                                                    |                                              |                                              |
|                  | Vibration                | 5 Grms, 5-500 Hz, 3 Axis                                                                                                    |                                              |                                              |
|                  | Shock                    | 50 Grms, Half-sine 11 ms                                                                                                    |                                              |                                              |
| General          | Certification            | CE/FCC                                                                                                                      |                                              |                                              |
|                  | Thermal Dissipation      | Fanless System                                                                                                              |                                              |                                              |
|                  | Material                 | Extruded Aluminum with Heavy Duty Metal                                                                                     |                                              |                                              |
|                  | Dimensions (W x H x D)   | 168 x 47 x 135 mm<br>(6.61" x 1.85" x 5.31")                                                                                | 168 x 61 x 135 mm<br>(6.61" x 2.40" x 5.31") | 168 x 76 x 135 mm<br>(6.61" x 2.99" x 5.31") |
|                  | Net Weight               | 1.1 kg (2.43lb)                                                                                                             | 1.15 kg (2.54lb)                             | 1.45 kg (3.20lb)                             |
|                  | Operating System         | Windows 10 (IoT / Professional), Linux                                                                                      |                                              |                                              |