



Key Features

- Onboard Intel® Celeron® Processor J1900, up to 2.42GHz
- Dual Display 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
- 6x RS-232/422/485 with Auto Flow Control
- 1x USB3.0 and 4x USB2.0 Port
- 4x Isolated DI and 4x Isolated DO Port
- 1x Removable 2.5" SATA HDD bay, 1x Internal 2.5" SATA HDD bay
- 1x CFast/ mSATA
- 2x Full-size Mini-PCIe, 2x SIM socket
- 2x PCI Express X4 expansion slot (1-Lane)
- 9~48V DC Input with build-in ignition power control
- -40°C~70°C wide temperature operation

Specifications

Processor

- Onboard Intel® Celeron® J1900 Quad Core Processor, up to 2.42 GHz

BIOS

- AMI BIOS, 64Mbit SPI Flash ROM built on board

Memory

- 1x DDR3L-1066/1333MHz 204-Pin SO-DIMM Socket
- Support up to 8GB (un-buffered and non-ECC)

Graphics

- Integrated Intel® HD Graphics
- Supports Dual Independent Display
- 1x DVI-I (DVI-D+VGA)
- 1x DisplayPort

Audio

- Realtek ALC888S
- High Definition Audio

Ethernet

- 2x Intel® i210-AT GbE LAN Port, Support Wake-on-LAN and PXE

Watchdog Timer

- Software Programmable Supports 1~255 sec. System Reset

I/O Ports

- 1x DVI-I
- 1x DisplayPort
- 2x GbE RJ45
- 1x USB 3.0 Port
- 4x USB 2.0 Port
- 6x RS232/422/485 with Auto Flow Control, DB9
- 1x Line-out and 1x Mic-in, Phone Jack 3.5mm
- 4x Isolated DI and 4x Isolated DO Port, 10-Pin Terminal Block
- 1x Remote Power on/off Connector, 2-Pin Terminal Block
- 2x Universal I/O Bracket

External Switch

- 1x Power On/Off Button
- 1x AT/ATX Mode Switch
- 1x PC/Car Mode Switch
- 1x Clear CMOS Switch

Expansion

- 2x PCI Express X4 Slot (1-Lane)
- 1x Full-size Mini-PCIe Socket (mux with mSATA)
- 1x Full-size Mini-PCIe Socket (USB2.0 Only)
- 2x SIM Socket
- 4x Antenna Hole

Storage

- 1x Removable 2.5" SATA HDD Bay
- 1x Internal 2.5" SATA HDD Bay
- 1x CFast Socket (Shared by 1x SATA and mSATA)
- 1x mSATA Socket (Shared by 1x Mini-PCIe, 1x SATA and CFast)

Power Requirement

- Support Hardware AT, ATX Power Mode
- 1x 3-pin Terminal Block Connector with Power Input 9~48VDC
- Power Ignition Sensing
- 1x Optional AC/DC 12V/5A, 60W Power Adapter
- 1x Optional AC/DC 24V/5A, 120W Power Adapter

Protection

- Over Voltage Protection (OVP) Up to 52V
- Reverse Voltage Protection (RVP) up to -48V
- Over Current Protection (OCP) 20A

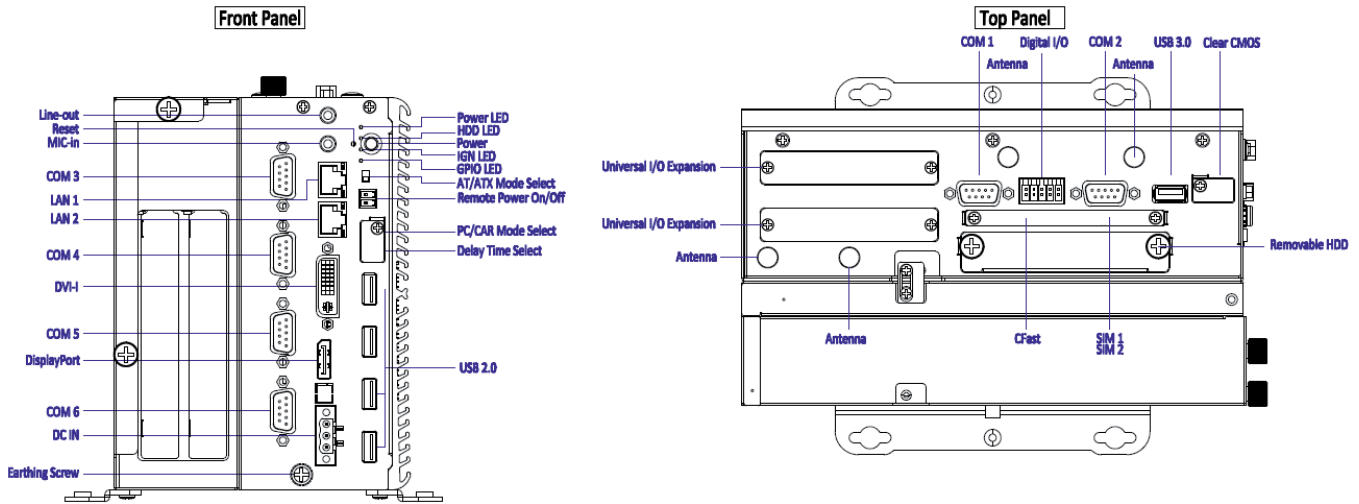
Environment

- Operating Temperature: Ambient with Air Flow: -40°C to 70°C (with Industrial Grade Peripherals)
- Storage Temperature: -40°C to 80°C
- Relative humidity: 10%~95% (non-condensing)
- Shock: 50 Grms, Half-sine 11 ms
- Vibration: 5 Grms, 5-500 Hz, 3 Axis

Physical

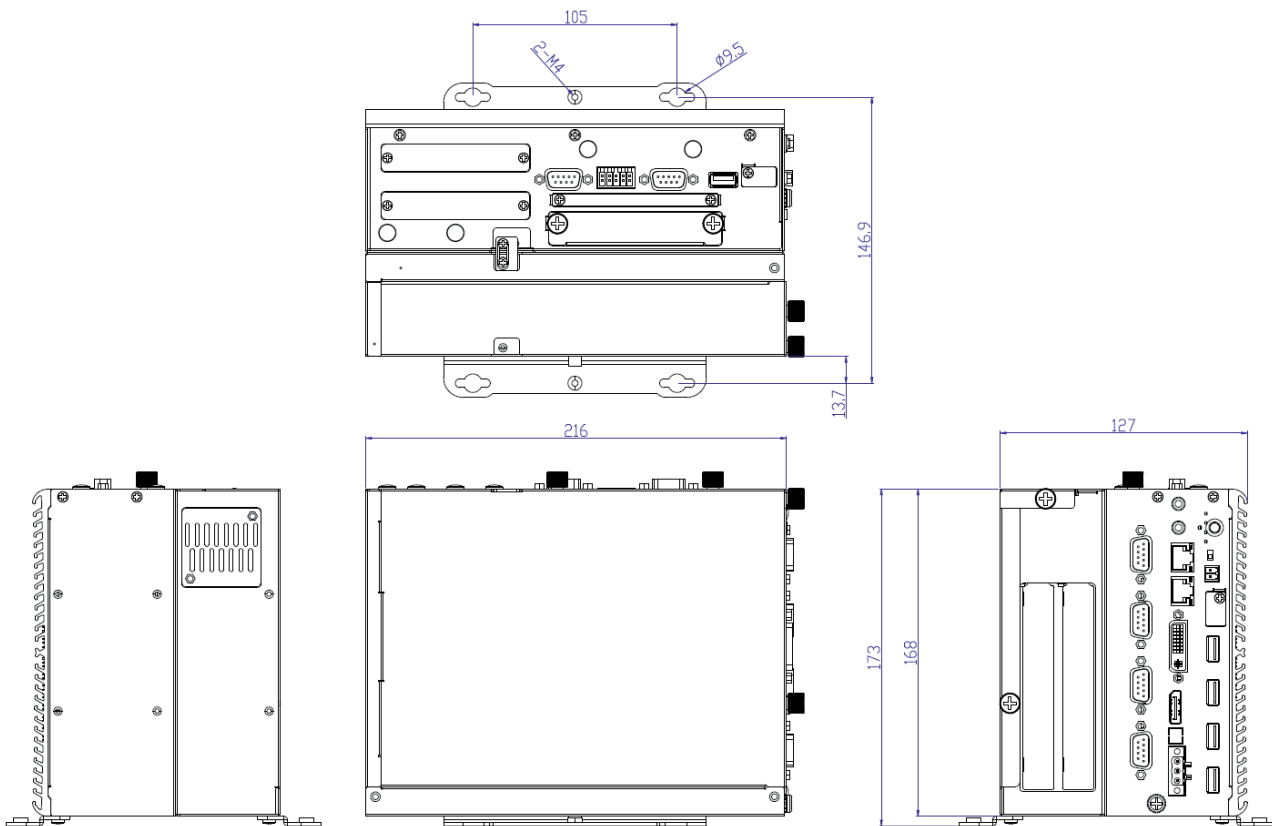
- Dimension (WxDxH): 127 x 216 x 168 mm
- Weight: 2.85 kg
- Extruded Aluminum with Heavy Duty Metal
- Wall mounting
- Stand mounting

External I/O Layout



Dimension

Unit: mm



Machine Vision PC

Available Model

Model No.	Product Description
AVM-2012E	Intel® J1900 Machine Vision Computer with 2x GbE, 1x USB 3.0, 4x USB2.0, 6x COM ports, 2x Universal I/O Brackets, 1x Removable 2.5" SATA HDD Bay, 1x Internal 2.5" SATA HDD Bay, 2x PCI Express X4 Slot (1-Lane)

Optional Accessories

Model No.	Product Description
GST60A12-GAV	Adapter AC/DC 12V 5A 60W with 3pin Terminal Block Plug 5.0mm Pitch
GST120A24-AV	Adapter AC/DC 24V 5A 120W with 3pin Terminal Block Plug 5.0mm Pitch
APCNEMA5-15P	Power Cord, 3-pin US Type, 180cm
APCCEE7-7	Power Cord, European Type, 180cm

Package Checklist

Item	Product Description	Q'ty
1	AVM-2012E Modulized Machine Vision Computer	1
2	Utility DVD Driver	1
3	Wall Mount Kit	1
4	DVI to VGA Adapter	1
5	Screw Pack	1