# AIR-100

## Edge AI Inference System with Intel Atom E3950 and One Intel MA2485 VPU

## Features

- Intel Atom E3950
- Intel Movidius Myriad X MA2485 VPU x1 Built in
- Integrated Nvidia GeForce GT1030 graphics for ultra HD playback
- Intel OpenVINO toolkit supported
- 1 x 204-pin SO-DIMM DDR3L 4GB memory (-20~85°C) built in
- 1 x 64GB SSD built-in
- 4 x independent HDMI outputs
- Reserve TPM 2.0 for security application
- Signage content management software built-in
- Integrated with Edge AI Suite

Acronis WISE-PaaS/SignageCMS WISE-DeviceOn

### OpenVINO™ Toolkit

- Model optimizer
- Inference engine
- Supports TensorFlow, Caffe, mxnet, ONNX

### Enhanced Inference Efficiency

Scaling AI inference workloads with modular, plug & play design

### VEGA-320 built-in

- Single MA2485 VPU
- M.2 2230 (Key A+E)
- PCIe Gen2 x1, USB 2.0

## Specifications

| | | AIR-100 |
|---|---|---|
| Processor System | CPU | Intel® Atom™ Processor E3950 |
| | System Chipset | Integrated in CPU |
| | L2 Cache | 2 MB |
| | BIOS | AMI uEFI 64-Mbit |
| Memory | Technology | 2 x DDR3L 204-pin SO-DIMM |
| | Max. Capacity | 16 GB (Pre-installed 4GB) |
| Graphic & Display Tech. | Graphic Engine | HDMI-1 and HDMI-2: NVIDIA® GeForce GT 1030<br>HDMI-3 and HDMI-4: Intel® HD Graphics 505 |
| | Graphic Memory | 2GB GDDR5 |
| | Resolution | HDMI 2.0: up to 3840 x 2160 @ 60Hz<br>HDMI 1.4: up to 3840 x 2160 @ 30Hz (HDMI-4 supports CEC function) |
| | Output | 2 x HDMI 1.4, 2 x HDMI 2.0 |
| | Multi Display | Up to 4 simultaneous outputs |
| | Video Format | Decode for H.264,VC-1,WMV9,H.265/HEVC,VP8,VP9,JPEG/MJPEG,MPEG2(only for Yocto project Linux)<br>Encode for H.264,MVC,WMV9,H.265/HEVC,VP8,VP9,JPEG/MJPEG |
| AI Engine | VPU | One Intel Movidius Myriad X MA2485 (1 x VEGA-320-01A1 Built-in) |
| Storage | SATA | 1 x 2.5-inch SATA III HDD/SSD (Pre-installed 64GB SSD) |
| Ethernet | Interface | Gigabit LAN controller |
| | Controller | 1 x Intel I211-AT |
| I/O Interface | LAN | 1 (RJ-45) |
| | USB 2.0 | 2 |
| | USB 3.0 | 2 |
| | Audio | 1 x audio phone jack for Mic In, 1 x SPDIF/Line Out (supports jack sensing via OS settings) |
| | Serial | 1 x RS-232 |
| Expansion | Mini PCIe | 1 x Full Size MiniPCIe support mSATA;<br>w/SIM holder, support WWAN module (USB interface) #1 |
| Trusted Platform Module | TPM 2.0 | Option |
| Power Requirement | Input Voltage | 19 V DC in (ATX/AT mode, default ATX) |
| Watchdog Timer | Output | Interrupt, system reset |
| | Interval | Programmable using WISE-PaaS/EdgeSense |
| Physical Characteristics | Mounting | Wall mount kits for LCD or plasma panels |
| | Dimensions (W x H x D) | 220 x 40 x 150 mm |
| | Weight | 1.7 kg |
| Environment | Operating Temperature | 0 ~ 50 °C with 0.7m/s air flow |
| | Relative Humidity | 95% @ 40° C (non-condensing) |
| Software Development Kit | Operating System | Pre-installed Microsoft Windows 10 |
| | Linux | By project |
| Certification | EMC | CE, FCC Class B, BSMI |
| | Safety | UL, CCC, BSMI, CB |

#1 SIM holder is hardware interface for wireless communication integration only. System level RF certification is not available.

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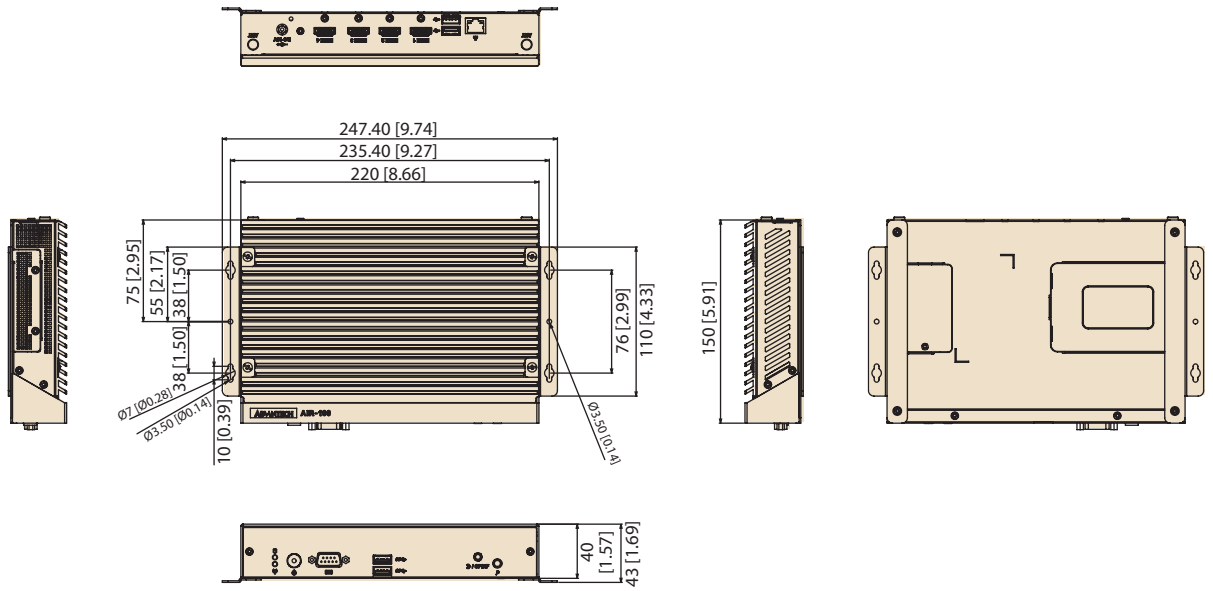
All product specifications are subject to change without notice.

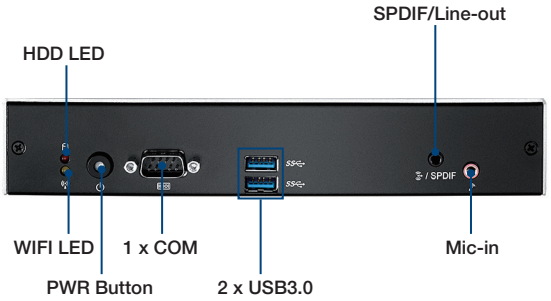
Last updated: 21-Apr-2021

## Dimensions

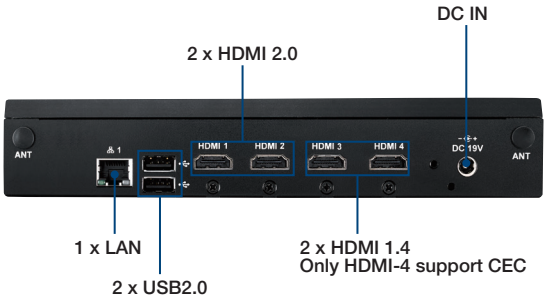
Unit: mm [inch]




## Front View




## Rear View




## Packing List

| Part Number | Description |
|---|---|
| - | 1 x AIR-100 unit |
| - | 1 x Power adapter (DC 19 V/3.42A 65 W) |
| - | 1 x Bracket set for fixing power adapter plug |
| - | 2 x Mounting brackets |
| - | 2 x User manual |
| - | 1 x Content management software |

## Power Cord

| Part Number | Description |
|---|---|
| 1700001524 | 3-pin power cord (US) |
| 170203183C | 3-pin power cord (EU) |
| 170203180A | 3-pin power cord (UK) |
| 1702031836 | 3-pin power cord (AU) |
| 1700008921 | 3-pin power cord (Japan) |
| 1700019146 | 3-pin power cord (China) |

## Ordering Information

| Part Number | Description |
|---|---|
| AIR-100-S61A1 | Intel Atom E3950 with one Movidius Myriad X, 4G memory and 64G SSD built-in and pre-installed win10 |

## Mounting Kits

| Part Number | Description |
|---|---|
| AMK-V005E | VESA mount kit (generic for ARK-DS/DS) |