

FWA-1212VC

Fanless Network Appliance for Edge Deployment with 5G and Wi-Fi6



Features

- Intel Atom® C3336/C3558/C3436L network SoC with Intel® QuickAssist Technology
- 1 x DDR4 2133/2400MHz, SODIMM (ECC optional) up to 16GB
- 2 x 1 GbE SFP/RJ45 combo ports (auto-negotiation)
- 4 x 1 GbE RJ45 LAN ports
- 1 x M.2 3052/3042 B-Key with SIM slot for 5G or LTE/4G module
- 1 x M.2 2230 E-Key for Wi-Fi module
- Supports eMMC onboard (default 16GB)
- 1 x mSATA slot
- 1 x 2.5" SSD bay

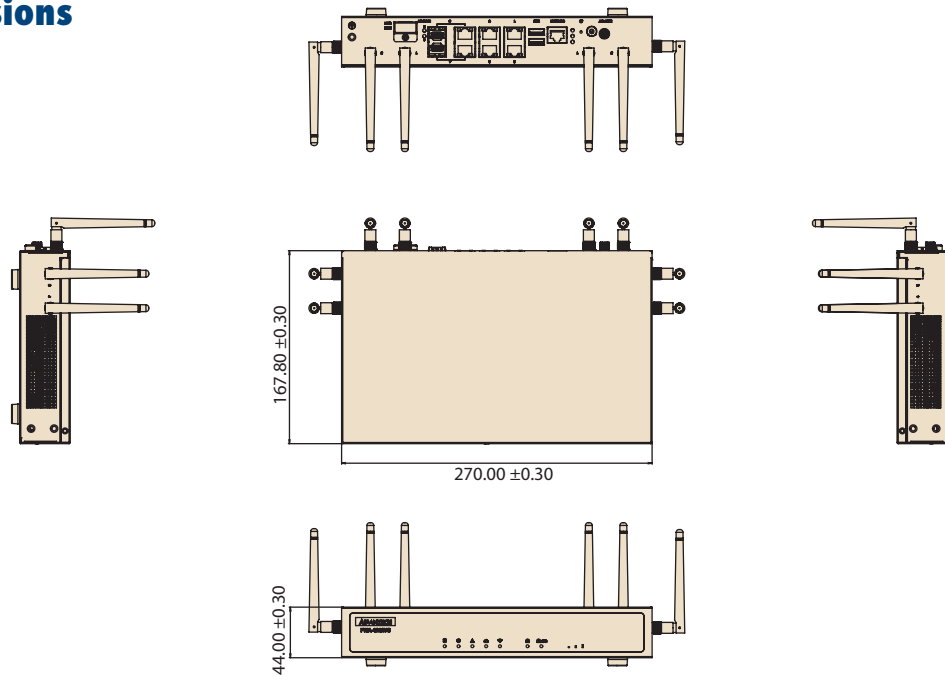


Specifications

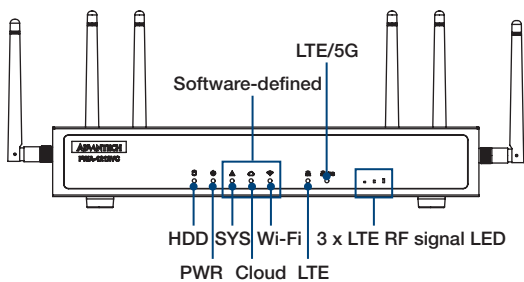
| System PN | | FWA-1212VC-2CA1S | FWA-1212VC-4CA1S | FWA-1212VCL-4CA1S |
|------------------------|---|--|------------------|-------------------|
| Form factor | | Tabletop | | |
| Processor System | Processor | Intel Atom C3336 | Intel Atom C3558 | Intel Atom C3436L |
| | Core Number | 2C | 4C | 4C |
| | Frequency | 1.5GHz | 2.2GHz | 1.3GHz |
| | L2 Cache | 4MB | 8MB | 8MB |
| | BIOS | AMI EFI 128 Mbit | | |
| Memory | Technology | DDR4 1866/2133/2400MHz | | |
| | Max. Capacity | 32GB | | |
| | Socket | 1 x 260pin SODIMM | | |
| | ECC Option | Supports both ECC or non-ECC SODIMM memory | | |
| Networking | Controller | 1 x Marvell 88E1543 for 2 combo ports 4 x Intel i211 for 1GbE RJ45 LAN ports | | |
| | 1GbE | 2 x 1GbE SFP/RJ45 combo ports (auto-negotiation) via Marvell 88E1543 PHY 4 x 1GbE RJ45 ports via Intel i211 | | |
| Expansion | Mini-PCIe | 1 x Full-size Mini-PCIe with SIM slot for Mini-PCIe LTE, Wi-Fi module or encryption card; | | |
| | m.2 | 1 x m.2 2230 E-key for Wi-Fi module 1 x m.2 3052 B-key for 5G module (compatible with m.2 3042 B-key for LTE/4G module) | | |
| Storage | eMMC | eMMC 16GB default onboard | | |
| | mSATA | 1 x mSATA slot(share the same connector with Mini-PCIe) | | |
| | 1.5" HDD bay | 1 x 2.5" SSD bay(optional) | | |
| I/O | USB | 2 x USB2.0 type A on rear | | |
| | Serial | 1 x Console port (RJ45 connector) | | |
| | LED Indicator | Rear IO: power, system, cloud Front IO: HDD, power, system, cloud, Wi-Fi, LTE, LTE/5G and LTE RF signal LED | | |
| | Others | 1 x DC jack with lock on rear 1 x Power button with LED indicator 1 x Software definable button | | |
| TPM | TPM | LPC connector reserved for TPM module option | | |
| Power | Power Type | Adapter | | |
| | Watts | 36W | | |
| | Input | 100~240 V _{AC} | | |
| | Connector | DC-Jack with lock | | |
| | Power Adapter | 12V 3A | | |
| Environment | Operating Temperature | 0 ~ 40° C (32 ~ 104° F) | | |
| | Storage Temperature | -20 ~ 60° C (-40 ~ 140 °F) and 40° C @5~95% RH non-condensing | | |
| Mechanical | Construction | Iron | | |
| | Dimensions (W x H x D) | 270 x 44 x 168 mm, 8.1" x1.32 " x 5.04" | | |
| | Weight | About 3kg | | |
| OS Support | | Linux (CentOS7.6, Ubuntu 18.4, etc.) | | |
| Advantech S/W Packages | QuickStart Linux Image (CentOS based reference BSP) | Afru, sensor-reader, Wi-Fi driver, 5G driver, Intel DPKD, Intel QAT | | |
| Certification/Safety | | CCC/CE/FCC/UL/CB (RF certification is not included) | | |

Dimensions

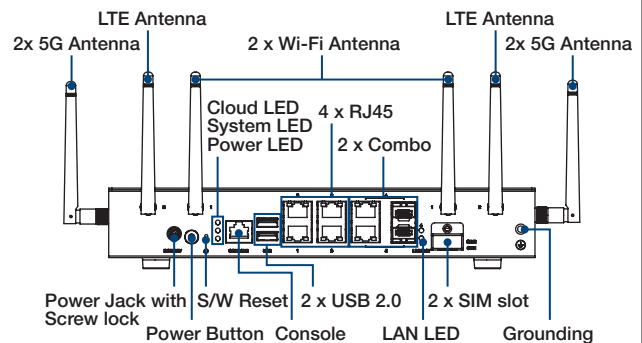
Unit: mm



Front Panel External I/O Mechanical Layout/Drawing



Rear Panel External I/O Mechanical Layout/Drawing



Ordering Information

| Part Number | Processor | DDR4 | 2G Memory | Console slot | USB port | LAN Port | m.2 for LTE/5G slot | m.2 for Wi-Fi slot | Mini PCIe | SIM Card | 2.5" SSD Bay |
|-------------------|-------------------|------|-----------|--------------|----------|----------|---------------------|--------------------|-----------|----------|--------------|
| FWA-1212VCL-2CA1S | Intel Atom C3336 | 1 | 1 | 1 | 2 | N/A | 4 | 1 | 1 | 2 | N/A |
| FWA-1212VC-2CA1S | Intel Atom C3336 | 1 | N/A | 1 | 2 | 2 | 4 | 1 | 1 | 2 | 1 |
| FWA-1212VC-4CA1S | Intel Atom C3558 | 1 | N/A | 1 | 2 | 2 | 4 | 1 | 1 | 2 | 1 |
| FWA-1212VCL-4CA1S | Intel Atom C3436L | 1 | N/A | 1 | 2 | 2 | 4 | 1 | 1 | 2 | 1 |

Packing List

| Part Number | Processor |
|---------------------------------|-----------|
| Console cable | 1 |
| 36W 12V 3A 100V-240V AC adaptor | 1 |
| China RoHS letter | 1 |
| FWA-1212VC system | 1 |

Accessories

| Item | Processor | Description |
|------------|------------|--|
| Power Code | 1700001524 | Power cord UL 3P 10A 125V 183cm, USA |
| | 170203183C | Power cord EU 3P 2.5A 250V 183cm, Europe |
| | 170203180A | Power cord BSI 3P 2.5A 250V 183cm, UK |
| | 1700008921 | Power cord PSE 3P 7A 125V 183cm, JP |
| | 1700019146 | Power cord CCC 3P 2.5A 250V 183cm, China |