

# FWA-1012VC

## Universal Network Appliance with Intel® Atom™ Processor C3000 for vE-CPE and SD-WAN

**NEW**



### Features

- Intel® Atom® C3000 System On Chip with Intel® QuickAssist Technology at 10Gbps and Intel® AES-NI and VT-d Support
- Supports SR-IOV on all ports by Intel SOC integrated MAC and Intel i350 Ethernet Controller
- Optional 3G, 4G LTE and WiFi connectivity for deployment flexibility
- Optional IEEE 802.at/af compliant PoE kit to be PSE to support up to two 25.5W PD



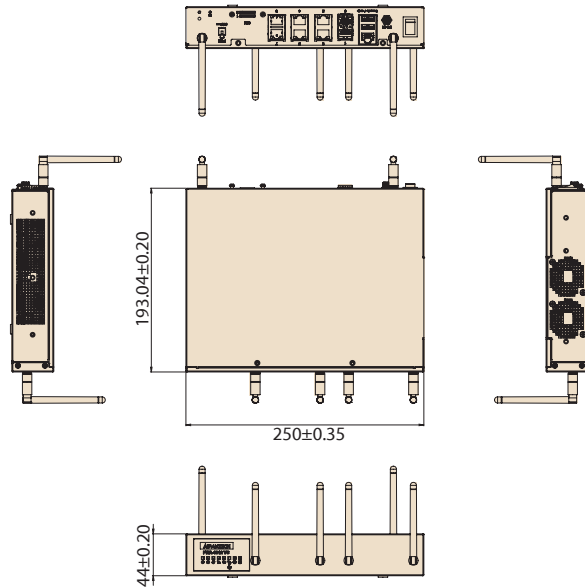
### Specifications

Form Factor	Tabletop			
Processor System	Processor	Intel® Atom™ Processor C3338	Intel® Atom™ Processor C3558	Intel® Atom™ Processor C3758
	Core Number	2	4	8
	Frequency	2.2GHz	2.2GHz	2.2GHz
	L2 Cache	2MB/Core Pair	2MB/Core	2MB/Core Pair
	BIOS	AMI EFI 64Mbit		
Virtualization	VT-x, VT-d			
Memory	Technology	DDR4 1866MHz	DDR4 2133MHz	DDR4 2400MHz
	Max. Capacity	32GB	64GB	
	Socket	1 x 288-pin DIMM	2 x 288-pin DIMM	
	ECC Support	ECC or Non-ECC		
Networking	Controller	1 x Marvell 88E1543	1 x Intel i350-AM2 1 x Marvell 88E1543	1 x Intel i350-AM4 1 x Marvell 88E1543
	1GbE	4 x 10/100/1000BASE-T RJ45 port via Intel® SoC Integrated MAC and Marvell 88E1543PHY	2 x SFP via Intel i350-AM2 4 x 10/100/1000BASE-T RJ45 port via Intel® SoC Integrated MAC and Marvell 88E1543PHY	2 x SFP and 2x 10/100/1000BASE-T RJ45 via Intel i350-AM4 4 x 1GbE RJ45 via Intel® SoC Integrated MAC and Marvell 88E1543PHY
Expansion	Mini PCIe	1 x Full-size Mini PCIe for WiFi module with 2 x antenna holes 1 x Half-size Mini PCIe for WiFi module with 2 x antenna holes (by project support)		
	SIM socket	2 x Mini SIM		
	M.2	1 x M.2 3042 B-key support USB, SATAIII or PCIe1 with 2 x SIM holders for 3G/4G module with 2 x antenna holes 1 x M.2 3042/2260/2280 B-key support USB, SATAIII or PCIe1 *each M.2 with 1 SIM holder by project support		
Storage	2.5" HDD/SSD	Optional 2.5" SATAIII SSD bracket (Max 9.5mm height)	1 x 2.5" SATAIII HDD/SSD bracket (Max 9.5mm height)	
I/O	Console port	1		
	USB3.0	2 x USB3.0 Type A host port		
	LED Indicator	Power, HDD, LTE, WiFi, SW defined status		
	Others	1 x Power Switch 1 x Software definable button with LED indicator		
TPM	Optional 1.2/2.0 support by TPM module			
Power	Power Type	External adaptor		
	Watts	36W	60W	
	Input	100 V ~ 240 V		
	Connector	DC Jack		
Environment	Power Adaptor	12V 5A		
	Operating Temperature (air flow 0.7 m/sec)	0 ~ 40 °C (32 ~ 104 °F)		
Cooling	Non-operating Temperature	-20 ~ 80 °C (-4 ~ 167 °F) and 40 °C @ 95% RH Non-Condensing		
		1 x system fan with smart fan		2 x system fans with smart fan
Mechanical	Construction	Iron		
	Mounting	Support rack -mounting option		
	Dimensions (W x H x D)	250 x 44 x 193.04 mm (9.8" x 1.7" x 7.5")		
	Weight	2.3 Kg (4.8lb)	2.4 Kg (5.0lb)	
OS support	Linux (CentOS, Red Hat, Ubuntu)			
Advantech S/W Packages	QuickStart Linux Image (CentOS based reference BSP)	afru, Imensors, flashrom, WiFi drivers, QMI Wireless, Intel® DPDK, Intel® QAT, DUI (Offline Diagnostics)		
	Individual Package	DUI (Offline Diagnostics)		
Certification	CE/FCC Class B, CCC CB, UL, FCC ID, CE-RED, Verizon OD (By project)			

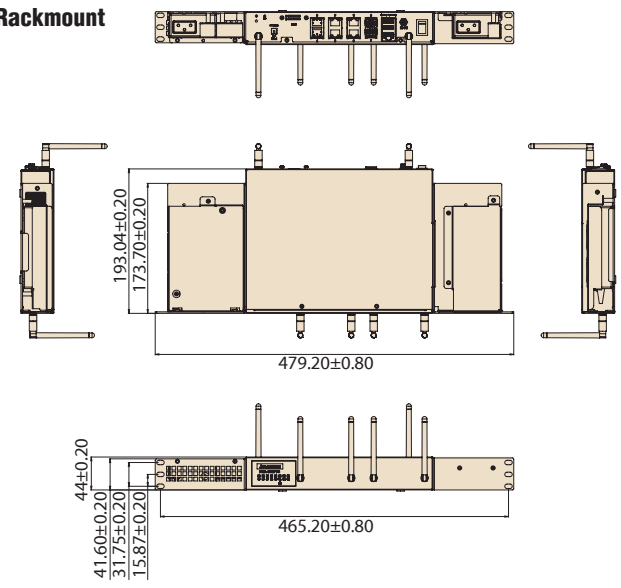
Note1: Other processor can be supported by request

## Dimensions

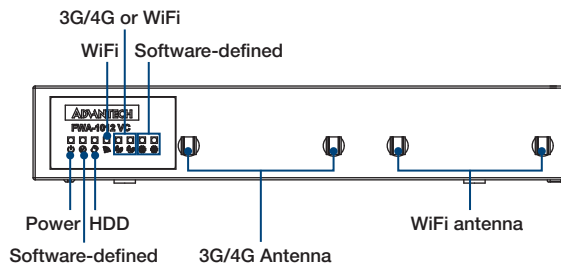
Unit: mm



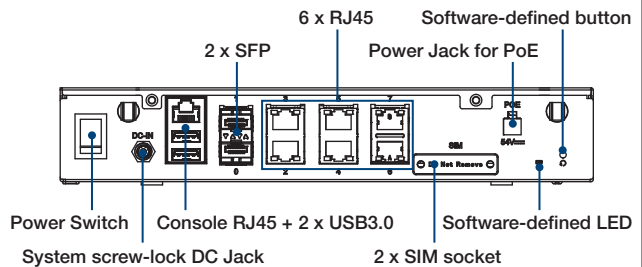
## Rackmount



## Front Panel External I/O Mechanical Layout/Drawing



## Rear Panel External I/O Mechanical Layout/Drawing



## Ordering Information

Part no.	CPU	DDR4	GbE RJ45	SFP	USB 3.0	Console RJ45	2.5" HDD Bracker	M.2 3042/2260/2280 B-Key	M.2 3042 B-key	Full Size Mini-PCIe	WiFi Module	LTE module	POE board	Power adaptor
FWA-1012VC-2CA1S	C3338 2core	1	4	NA	2	1	NA	1	1	1	NA	NA	NA	36W
FWA-1012VC-4CA1S	C3558 4core	2	4	2	2	1	NA	1	1	1	NA	NA	NA	60W
FWA-1012VCR-4CA1S	C3558 4core	2	4	2	2	1	NA	1	1	1	1	1	NA	60W
FWA-1012VC-8CA1S	C3758 8core	2	6	2	2	1	1	1	1	1	NA	NA	NA	60W
FWA-1012VCR-8CA1S	C3758 8core	2	6	2	2	1	NA	1	1	1	1	1	NA	60W
FWA-1012VCP-8CA1S	C3758 8core	2	6	2	2	1	NA	1	1	1	NA	NA	1	60W

## Optional Accessories

Part Number Description	Description	Supporting SKU
1700018550	Console cable	For all SKUs
985232600E	TPM1.2 Module	For all SKUs
989232600E	TPM2.0 Module	For all SKUs
FWA-1012VC-WLAN	WiFi module kit (Series PCE4302AN/Antenna/SMA cable/Screw)	For FWA-1012VC-4CA1S / FWA-1012VC-8CA1S
FWA-1012VC-WWAN	LTE module kit (Series EM7455/Antenna/SMA cable/Screw)	For FWA-1012VC-4CA1S / FWA-1012VC-8CA1S
FWA-1012VC-RMK	Rack mount kit (60W)	For FWA-1012VC-4CA1S / FWA-1012VC-8CA1S / FWA-1012VCR-4CA1S / FWA-1012VCR-8CA1S
FWA-1012VC-RMK1	Rack mount kit w/ PoE cover	For FWA-1012VCP-8CA1S
FWA-1012VC-RMK2	Rack mount kit (36W)	For FWA-1012VC-2CA1S
FWA-1012VC-POE	PoE module kit (with 54V adapter)	For FWA-1012VC-2CA1S / FWA-1012VC-4CA1S / FWA-1012VC-8CA1S / FWA-1012VCR-4CA1S / FWA-1012VCR-8CA1S
FWA-1012VC-HDD	2.5" HDD kit	For FWA-1012VC-2CA1S / FWA-1012VC-4CA1S / FWA-1012VC-8CA1S / FWA-1012VCR-4CA1S / FWA-1012VCR-8CA1S
1702002600	Power cord 3P 180 cm, USA	For FWA-1012VC-4CA1S / FWA-1012VC-8CA1S / FWA-1012VCR-4CA1S / FWA-1012VCR-8CA1S
1702002605	Power cord 3P 180 cm, Europe	For FWA-1012VC-4CA1S / FWA-1012VC-8CA1S / FWA-1012VCR-4CA1S / FWA-1012VCR-8CA1S
1702031801	Power cord 3P 180 cm, UK	For FWA-1012VC-4CA1S / FWA-1012VC-8CA1S / FWA-1012VCR-4CA1S / FWA-1012VCR-8CA1S
1700000237	Power cord 3P 180 cm, JP	For FWA-1012VC-4CA1S / FWA-1012VC-8CA1S / FWA-1012VCR-4CA1S / FWA-1012VCR-8CA1S

Part Number Description	Description	Supporting SKU
1700009652	Power cord 3P 180 cm, China	For FWA-1012VC-4CA1S / FWA-1012VC-8CA1S / FWA-1012VCR-4CA1S / FWA-1012VCR-8CA1S
1700025855-01	Power cord 3P 180 cm, India	For FWA-1012VC-4CA1S / FWA-1012VC-8CA1S / FWA-1012VCR-4CA1S / FWA-1012VCR-8CA1S
1700025112-01	Power cord 3P 180 cm, Brazil	For FWA-1012VC-4CA1S / FWA-1012VC-8CA1S / FWA-1012VCR-4CA1S / FWA-1012VCR-8CA1S
1700022938-01	Power cord 3P 300 cm, Korea	For FWA-1012VC-4CA1S / FWA-1012VC-8CA1S / FWA-1012VCR-4CA1S / FWA-1012VCR-8CA1S
1700011524	Power cord 3P 180 cm, USA	For FWA-1012VC-2CA1S
1700018744	Power cord 3P 180 cm, Europe	For FWA-1012VC-2CA1S
1700025803-01	Power cord 3P 180 cm, UK	For FWA-1012VC-2CA1S
1700008921	Power cord 3P 180 cm, JP	For FWA-1012VC-2CA1S
1700025113-01	Power cord 3P 180 cm, China	For FWA-1012VC-2CA1S
1700022814-01	Power cord 3P 180 cm, Brazil	For FWA-1012VC-2CA1S
1700018409	Power cord 3P 300 cm, Korea	For FWA-1012VC-2CA1S

## Packing List

Part Number	Description
96PSA-A60W12W6	ADP A/D 100-240V 60W 12V C14 LOCKABLE DC PLUG