

# FWA-1012VC

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

Preliminary



### 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

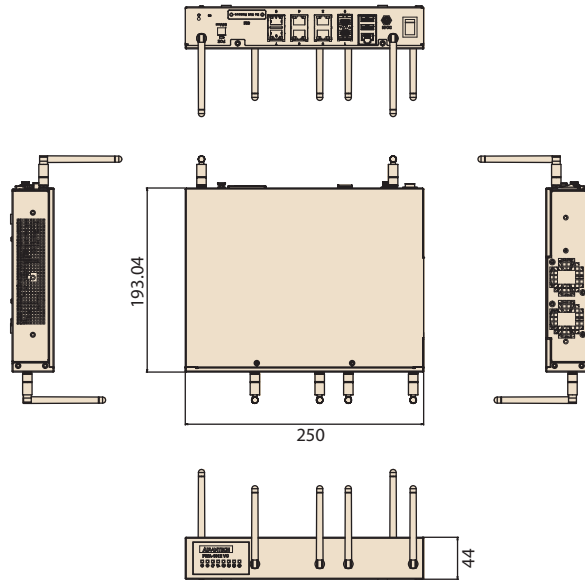
### Specifications

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	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		
	Power Adaptor	12V 5A		
Environment	Operating Temperature (air flow 0.7 m/sec)	0 ~ 40 °C (32 ~ 104 °F)		
	Non-operating Temperature	-20 ~ 80° C (-4 ~ 167° F) and 40° C @ 95% RH Non-Condensing		
Cooling		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, CC CB, UL, FCC ID, CE-RED		

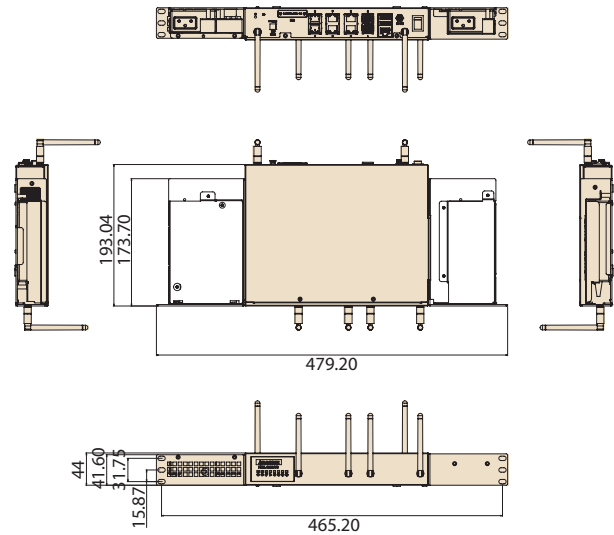
Note1: Other processor can be supported by request

## Dimensions

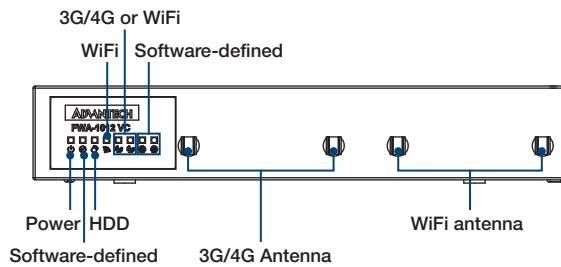
Unit: mm



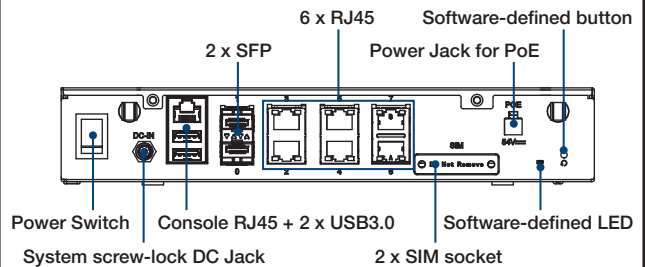
## Rackmount



## 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

## Packing List

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

## Optional Accessories

Part Number	Description
1700018950	Console cable
98923260H0E	TPM1.2 Module
TBD	PoE module kit (with 54V adapter)
TBD	4G module kit (with 2x external antenna)
TBD	Wifi module kit (with 2x external antenna)
TBD	Rack-mount kit
1702002600	Power cord 3P 180 cm, USA
1702002605	Power cord 3P 180 cm, Europe
1702031801	Power cord 3P 180 cm, UK
1700000237	Power cord 3P 180 cm, JP
1700009652	Power cord 3P 180 cm, China
1700025855-01	Power cord 3P 180 cm, India
1700025112-01	Power cord 3P 180 cm, Brazil
1700022938-01	Power cord 3P 300 cm, Korea