

FWA-1112VC

Fanless Network Appliance for SD-WAN & uCPE Edge deployment with 5G & Wi-Fi 6E Certification



Features

- Intel® Atom® C3000-series processor
- Fan-less design
- IP40 compliance
- Wide-operating temperature support from -20 ~ 70 °C by SKU option
- Design reserved for 5G and Advanced-LTE module
- Design reserved for 802.11ax (Wi-Fi 6E) module
- Reliability enhancement with better ESD/Surge protection design
- 6x ethernet interfaces with 6xRJ-45 connector or 4x RJ-45 + 2x 10G/1G SFP+ connector by SKU



Specifications

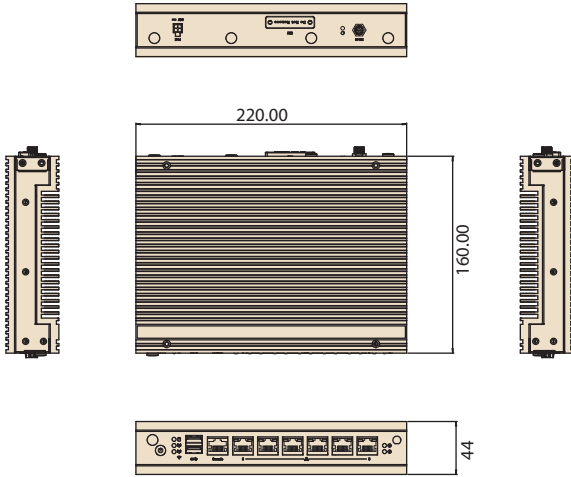
PN		FWA-1112VC-4CA1S	FWA-1112VC-8CA1S	FWA-1112VCR-4CA1S	FWA-1112VCR-8CA1S	FWA-1112EW-8CA1S
Processor	CPU	Intel® Atom® C3558	Intel® Atom® C3758	Intel® Atom® C3558	Intel® Atom® C3758	Intel® Atom® C3708
	Core Count	4C	8C	4C	8C	8C
	Base Frequency	2.2GHz	2.2GHz	2.2GHz	2.2GHz	1.7GHz
	TDP	16W	25W	16W	25W	17W
	QAT Technology	Yes	Yes	Yes	Yes	Yes
	BIOS	AMI Efi 64Mbit				
Memory	Technology	DDR4 2133MHz	DDR4 2400MHz	DDR4 2133MHz	DDR4 2400MHz	DDR4 2133MHz
	Socket	1 x 260-pin SO-DIMM				
	Max. Capacity	32GB				
	ECC Support	YES				
Storage	m.2_storage	1 x m.2280 SATAIII SSD				
	eMMC_storage	Default not installed; 4GB/8GB/16GB/32GB is optional by project support				
Network	Controller	Intel® SoC MAC with 1 x Marvell 88E1543 PHY, 2 x Intel i210-AT				
	Connector	4 x RJ45 + 2 x 10G/1G SFP+				
	PoE	2 x PoE+ up to 30W/port is optional by project support				
	VPD	Yes				
	SSID	Yes				
I/O	Console	1 x RJ45 port				
	USB	2 x USB3.0 Type A port				
	HDMI/VGA	NA				
Expansion	M.2	1 x M-key for 2280 SATAIII SSD 1 x B-key for 3042/3052 LTE/5G module 1 x E-key for 2230 Wifi module				
	Mini-PCIe	NA				
	SIM	Default 1 x Mini-SIM socket; 2nd Mini SIM socket for the 2nd LTE module is optional by project support				
	TPM	TPM2.0 on-board				
LED	LED	2 x Fixed LED: Power, HDD 2 x SW defined LED: LTE, LTE&Wifi 2 x SFP+ LED: SFP+1, SFP+2				
	PW on/off	Button	1 x Power Button			
	External Power Adaptor	Power Type	ATX mode			
Watts		36W				
Input		100 ~ 240Vac, 50/60Hz				
Connector		DC Jack Lockable				
Output		12Voc 3A, 36W				
PoE Adaptor	Optional; PoE is optional by project					
Environment	Operating (0.7m/s air flow)	0 ~ 70 °C (32 ~ 158 °F)	0 ~ 60 °C (32 ~ 140 °F)	0 ~ 70 °C (32 ~ 158 °F)	0 ~ 60 °C (32 ~ 140 °F)	-20 ~ 70 °C (-4 ~ 158 °F)
	Non-operating	Temperature -40 ~ 85 °C (-40 ~ 185 °F) and 40 °C @ 95% RH Non-Condensing				
Mechanical	Material	Iron chassis with aluminum heat-sink				
	Dimensions	220 x 160 x 44 mm (8.7" x 6.3" x 1.7")				
	Weight	2.3Kg (5.07lb)				
	Mounting	Rack Mount, Wall Mount				
OS	OS	Linux				
SW	SW	QuickStart Linux Image, Server iManager				
Others	IP Rating	IP40				
	Safety	UL 62368, CB 60950/62368, CCC				
Certification	EMC	CE EN55032/EN55024 ClassB, FCC ClassB, AS/NZS CISPR32, IEC-61000-4-2/61000-4-5, EN 300 386, VCCI 32-1		CE EN55032/EN55024 ClassB, FCC ClassB, AS/NZS CISPR32, IEC-61000-4-2/61000-4-5, EN 300 386, FCC ID, CE RED, VCCI 32-1		CE EN55032/EN55024 ClassB, FCC ClassB, AS/NZS CISPR32, IEC-61000-4-2/61000-4-5, EN 300 386, VCCI 32-1
	ROHS	ROHS, REACH, WEEE				

- 2 x PoE+ design up to 30W/port is reserved but not included; available by project support
- eMMC design is reserved but not included; available by project support
- Default RF module slot is 1 x M.2 B-key 3042/3052 for LTE/5G and 1 x M.2 E-key 2230 for Wifi5/Wi-Fi 6E
- 2 x LTE or Mini-PCIe Wifi design is reserved by BOM option, available by project support
- 6 x RJ45 SKU is available by BOM option

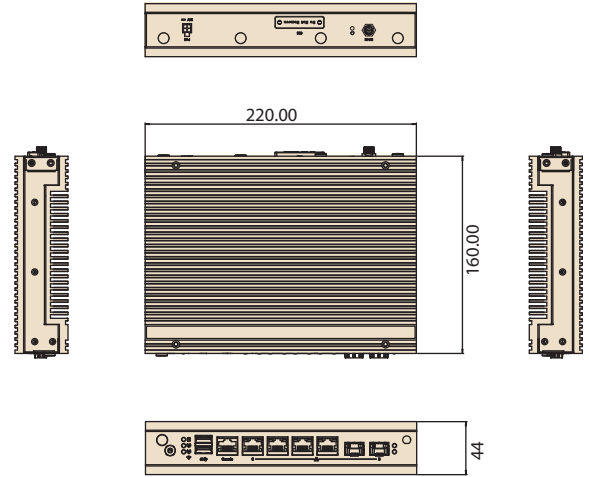
Dimensions

Unit: mm

6 x RJ45 SKU

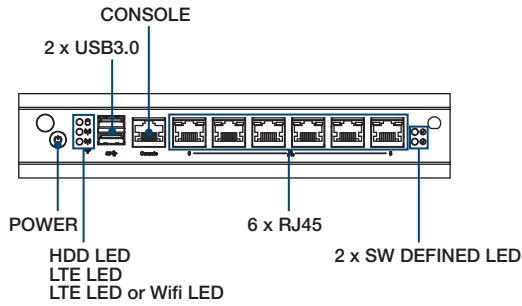


4 x RJ45 + 2 x 10G/1G SFP+ SKU

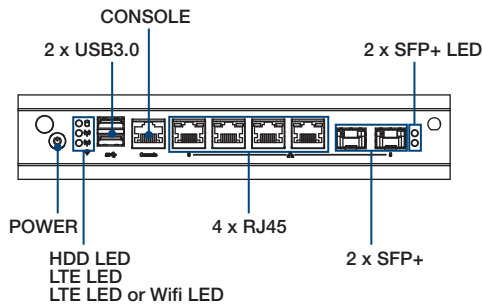


Front Panel External I/O Mechanical Layout/Drawing

6 x RJ45 SKU

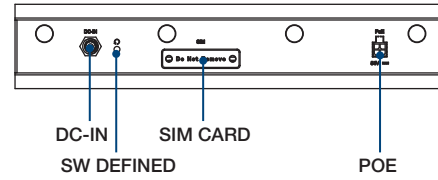


4 x RJ45 + 2 x 10G/1G SFP+ SKU

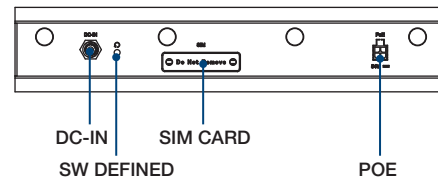


Rear Panel External I/O Mechanical Layout/Drawing

6 x RJ45 SKU



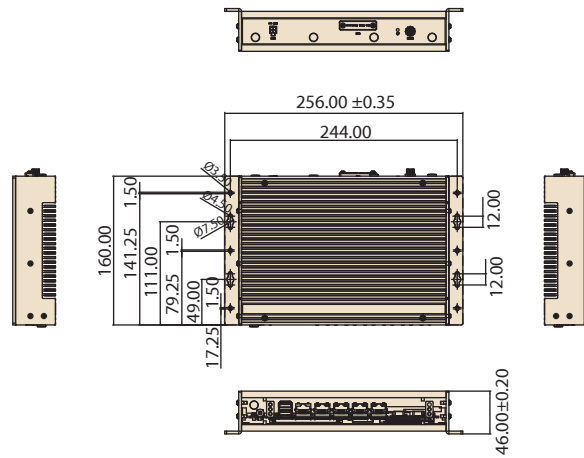
4 x RJ45 + 2 x 10G/1G SFP+ SKU



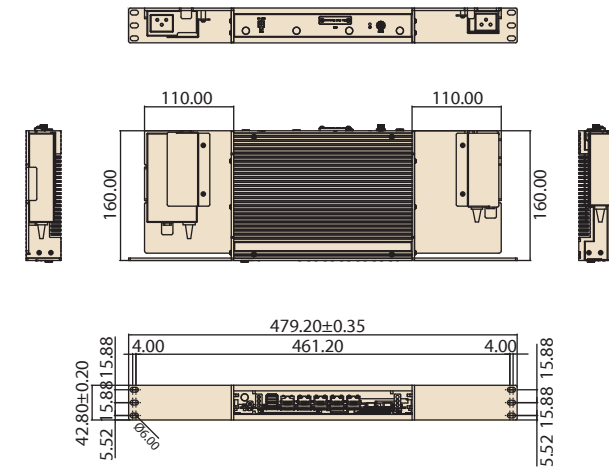
Dimensions

Unit: mm

Wall Mount Kit



Rack Mount Kit



Ordering Information

Part No.	CPU	Core	Fan-less	Ethernet	Console	USB 3.0	So-DIMM DDR4 slot	M.2 2280 SSD slot	M.2 3042/3052 LTE/5G slot	M.2 2230 Wifi slot	eMMC	PoE	DC input
FWA-1112VC-4CA1S	Intel Atom® C3558 2.2GHz	4	0 ~ 70 °C (32 ~ 158 °F)	4 x RJ45 + 2 x 10G/1G SFP+	1 x RJ45	2	1	1	1	1	Optional	Optional	36W
FWA-1112VC-8CA1S	Intel Atom® C3758 2.2GHz	8	0 ~ 60 °C (32 ~ 140 °F)	4 x RJ45 + 2 x 10G/1G SFP+	1 x RJ45	2	1	1	1	1	Optional	Optional	36W
FWA-1112VCR-4CA1S	Intel Atom® C3558 2.2GHz	4	0 ~ 70 °C (32 ~ 158 °F)	4 x RJ45 + 2 x 10G/1G SFP+	1 x RJ45	2	1	1, w/ 5G module	1, w/ WiFi6E module	1, w/ WiFi6E module	Optional	Optional	36W
FWA-1112VCR-8CA1S	Intel Atom® C3758 2.2GHz	8	0 ~ 60 °C (32 ~ 140 °F)	4 x RJ45 + 2 x 10G/1G SFP+	1 x RJ45	2	1	1, w/ 5G module	1, w/ WiFi6E module	1, w/ WiFi6E module	Optional	Optional	36W
FWA-1112EW-8CA1S	Intel Atom® C3708 1.7GHz	8	-20 ~ 70 °C (-4 ~ 158 °F)	4 x RJ45 + 2 x 10G/1G SFP+	1 x RJ45	2	1, 8G DDR4	1	1	1	NA	NA	36W

Optional Accessories

Item	Description	PN
36W Power Cord	Canada, USA, Philippines, Thailand, Taiwan	1700001524
	Europe, Indonesia, Israel	170203183C
	Malaysia, Singapore, UK	170203180A
	Japan	1700008921
	Korea	1700018409
	China	1700019146
	Brazil	1700022814-11
	India	1700025113-11
PoE Adaptor	A/D 100-240V 65W 54V C14 4PIN MINI HOUSING 62368	XFWA-FSP065-DWAN3
Mounting Kit	Wall Mount Kit	FWA-1112VC-WMK
	Rack Mount Kit	FWA-1112VC-RMK
RF Kit	Wi-Fi 6E Kit	FWA-1112VC-WLAN1
	LTE Kit	FWA-1112VC-WWAN
Others	5G Kit	FWA-1112VC-WWAN4
	Console Cable	1700020691-01

Packing List

Description	Qty
PW adaptor	1unit
FWA-1112 series bare bone system	1unit