FWA-2112

1U Network Appliance with Intel Atom® C3000 Processor for SD-WAN, uCPE and Network Applications Processor

Features

- Intel Atom® C3000 processor with up to 16 cores and Intel® QAT
- Low system power consumption
- Support for both single and redundant PSU; fast customization without chassis modification
- Multiple onboard LAN ports including 6 x RJ45 ports and 4 x 10 Gbps SFP+
- Supports 2 Network Mezzanine Card bays for 1GbE, 10GbE port expansion, 5G /4G module expansion
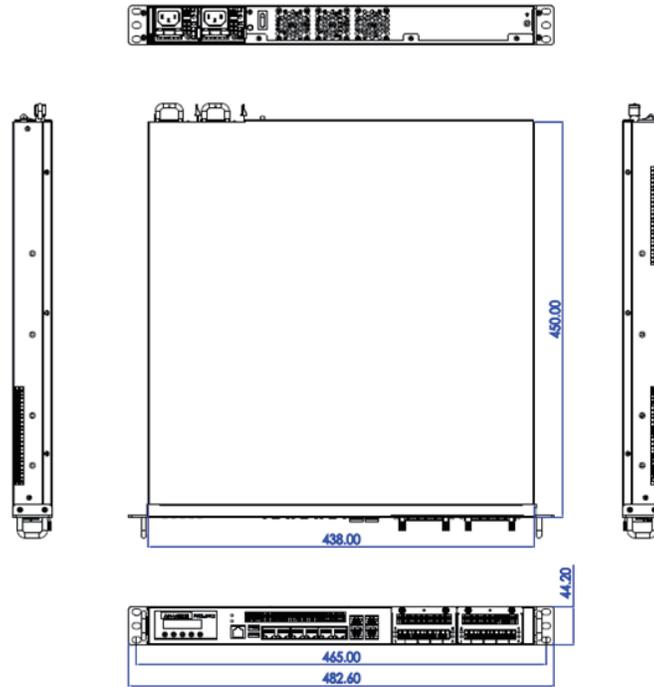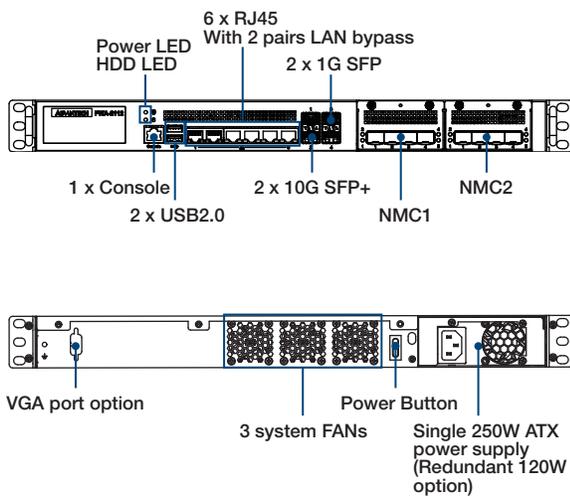- Includes Advantech Server iManager

Specifications

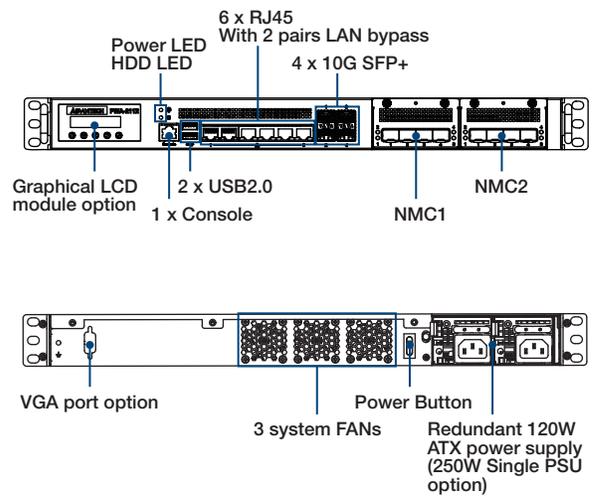|		FWA-2112-4CA1S	FWA-2112H-8CA1R	FWA-2112H-16A1R
Form factor		1U Rackmount	1U Rackmount	1U Rackmount
Processor System	Processor	C3558	C3758	C3958
	Core Number	4C	8C	16C
	Base Frequency	2.2GHz	2.2GHz	2.0GHz
	L2 Cache	2MB/Core	2MB/Core	2MB/Core
	BIOS	AMI EFI 64 Mbit		
Memory	Technology	DDR4 2133/2400MHz		
	Max. Capacity	64GB (2 x 32GB SO-DIMM)		
	Socket	2 x 260pin 180D(F) SO-DIMM		
	ECC Support	ECC Option (based on Memory module)		
Networking	Controller	6x Intel i210-AT 1x Marvell 88E1543	6x Intel i210-AT	6x Intel i210-AT
	Interface	6 x 10/100/1000 Mbps RJ45 2 x 1Gbps SFP 2 x 10Gbps SFP+	6 x 10/100/1000 Mbps RJ45 4 x 10Gbps SFP+	6 x 10/100/1000 Mbps RJ45 4 x 10Gbps SFP+
	LAN Bypass	2 pairs of Advanced LAN Bypass		
Expansion	NMC Slot	2 x NMC Slots		
	Mini PCIE	1 x Mini PCIE (full-size default, half-size option)		
Storage	mSATA	1 x mSATA (full-size default, half-size option)		
	CF slot	option		
	2.5" HDD bay	NA	1 x 2.5" HDD bay	1 x 2.5" HDD bay
	3.5" HDD bay	1 x HDD bay (compatible with 2.5' or 3.5' storage)		
I/O	USB	2 x USB2.0 Type A on Front		
	Serial	1 x Console port (RJ45 connector)		
	Power LED	1 (Green on indicates power on)		
	HDD LED	1 (Amber blink indicates HDD Read/Write)		
	Pin Header	GPIO , Reset, COM and USB		
TPM	TPM	option (TPM2.0 Module)		
LCD Module	LCD Module	option (16 x2 graphic display, 5 buttons)		
Power	Power Type	AC Single Power	AC Redundant Power	AC Redundant Power
	Watts	Single 250W	Redundant 120W	Redundant 120W
	Input	100~240 VAC, auto range		
	Connector	AC 3pin plug		
Environment	Operating Temperature (air flow 0.7 m/sec)	0 ~ 40 °C (32 ~ 104 °F)		
	Non-operating Temperature	-40 ~ 60 °C (-40 ~ 140 °F)		
	Humidity	95% @ 40 °C (non-condensing)		
	Vibration Resistance	with SATA HDD: 0.5Grms, IEC 60068-2-64, 5-500Hz, 1hr/axis		
	Shock Protection	with SATA HDD: 10Grms, 11ms, IEC 60068-2-27, X,Y,X,X-X,X-Y,Y-Z axis, 3times per axis		
Cooling		3 system smart FAN		
Mechanical	Construction	Iron		
	Mounting	1U Rackmount		
	Dimensions (W x H x D)	438 x 44 x 450 mm , 17.24" x 1.75" x 17.72"		
	Weight	9.5kg		
OS Support		Linux (CentOS, Red Hat, Ubuntu, etc.)		
Advantech S/W Packages		QuickStart Linux Image (CentOS based reference BSP) including Afru LCD4Linux Advanced LBP Utility Intel DPDK Intel QAT (need add one QAT PCIE Card) DUI (Offline Diagnostics) Individual packages: Advanced LBP Library DUI (Offline Diagnostics)		
Certification/Safety		CCC/CE/FCC/UL/CB		

ADVANTECH **Network Appliances**

Dimensions

Unit: mm

450.00

438.00

44.20

465.00

482.60

FWA-2112-4CA1S External I/O Mechanical Layout/Drawing

Power LED
HDD LED

6 x RJ45
With 2 pairs LAN bypass

2 x 1G SFP

1 x Console

2 x USB2.0

2 x 10G SFP+

NMC1

NMC2

VGA port option

3 system FANs

Power Button

Single 250W ATX
power supply
(Redundant 120W
option)

FWA-2112H-8CA1R / FWA-2112H-16A1R External I/O Mechanical Layout/Drawing

Power LED
HDD LED

6 x RJ45
With 2 pairs LAN bypass

4 x 10G SFP+

Graphical LCD
module option

1 x Console

2 x USB2.0

NMC1

NMC2

VGA port option

3 system FANs

Power Button

Redundant 120W
ATX power supply
(250W Single PSU
option)

Ordering Information

Part Number	Processor	SO-DIMM slot	Console	USB2.0	LAN Port			NMC	Mini PCIE	mSATA	2.5" HDD	3.5" HDD	PSU	LCM
					Copper	SFP	SFP+							
FWA-2112-4CA1S	Intel® Atom® C3558	2	1	2	6	2	2	2	1	1	0	1	Single AC 250W	0
FWA-2112H-8CA1R	Intel® Atom® C3758	2	1	2	6	NA	4	2	1	1	1	1	Redundant AC 120W	0
FWA-2112H-16A1R	Intel® Atom® C3958	2	1	2	6	NA	4	2	1	1	1	1	Redundant AC 120W	0

Packing List

Part Number	Description	Quantity
1700019243-11	SATA Cable 7P/SATA 7P 15CM 180/180	1
1700020691-01	Console cable D-SUB 9P(F)/RJ45-8P8C 220cm	1
1700024783-01	SATA Cable 7P/SATA 7P 30CM 180/180	1
1960066407T000	Handle for FWA-3305U	2
1960066407T000 1960089993N005	Rack mount Bracket	2
1990007778T000	Rubber damper PG SF-006 BLACK	4

Optional Accessories

Part Number	Description
1702002600	Power cord 3P 180cm, USA
1702002605	Power cord 3P 180cm, Europe
1702031801	Power cord 3P 180cm, UK
1700000237	Power cord 3P 180cm, JP
1700009652	Power cord 3P 180cm, China
98923260J0E	TPM2.0 module
9680016959	Slide rail