

1U Rackmount Intel® 8th Generation Platform Network Appliance

Front View



Rear View



Features

- 1U Rackmount Network Appliance
- Dual Intel® 8th Generation Core/Xeon processor
- Intel® Communications Chipset C246
- DDR4 2133/2400/2666 MHz UDIMM x 4, Up to 64 GB
- IPMI Support by Aeon Module
- Onboard 2 LAN (I350 AM2)
- Up to 24 Gigabit Ethernet Ports Via NIM
- 1 x 3.5" SATA HDD or 2.5" SATA HDD x 2, mSATA Socket x 1
- LCM with Keypad x 1
- RJ-45 Console x 1, USB 3.0 x 2, 1 GbE LAN x 2
- 220W Single Power



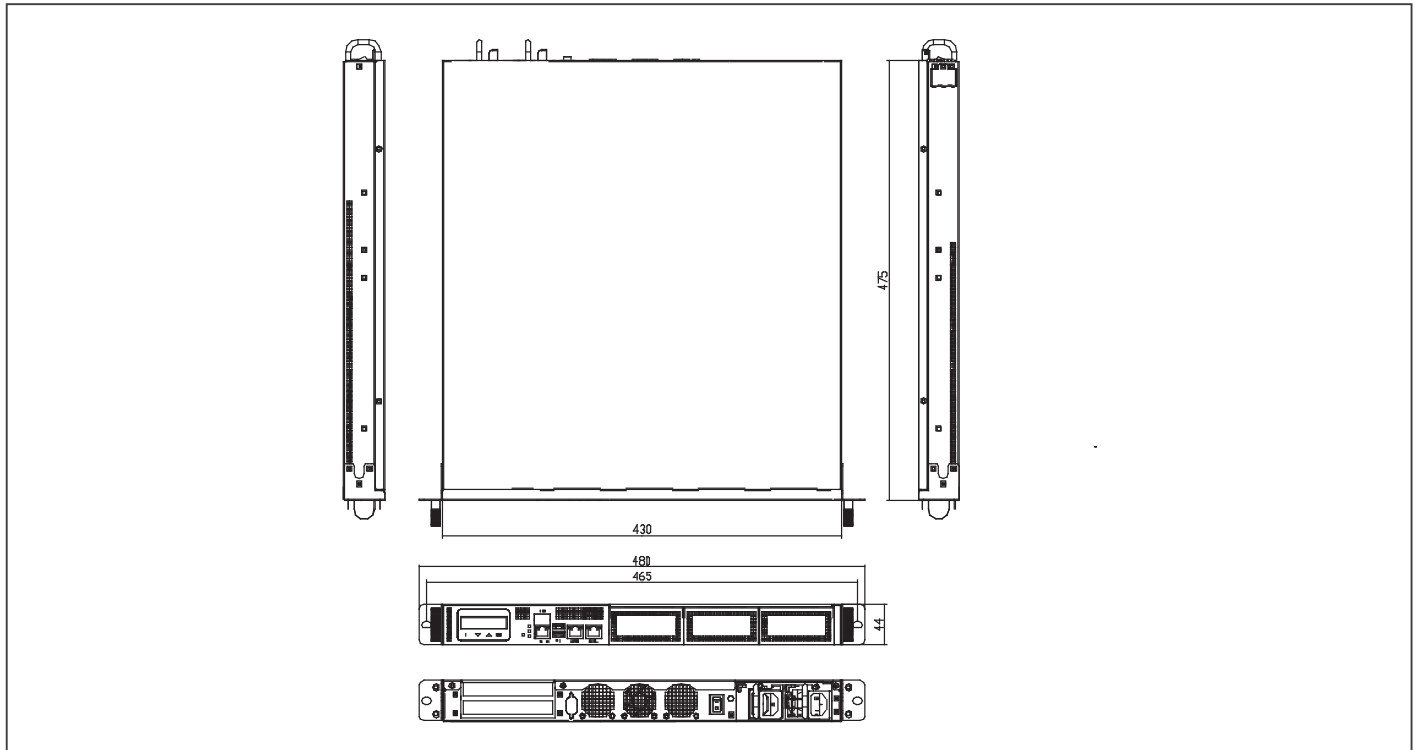
Storage	
HDDs	Internal 2.5" SATA HDD x 2 or 3.5" SATA HDD x 1 (Optional)
CF/CFast/mSATA	Default mSATA Slot (Optional CFast™ Socket)
Expansion/Internal Interface	
PCIe slot	NIM x 3 PCIe [x8] X1 slot by riser card Mini PCIe Slot x 1 or mSATA x 1
Mini-PCIe slot	Mini Card x 1
Keyboard and Mouse	Pin-header
Universal Serial Bus	USB 3.0 x 2, Box Header (2.0mm)
Miscellaneous	
RTC	Internal RTC
Watchdog Timer	1~255 steps by software programmable, 1 sec per step
Software Button	GPIO Programmable push button x 1
TPM	Optional TPM v2.0
GPIO	8bits, BIOS default 4 bits input, 4bits output.
FAN	2
MTBF (Hours)	TBD
Color	Black
Environmental Parameters and Dimension	
Power Requirement	220W ATX PSU
Operation Temp.	32°F ~ 104°F (0°C ~ 40°C)
Storage Temp.	-4°F ~ 140°F (-20°C ~ 60°C)
Operating Humidity	10% ~ 80%
Storage Humidity	10% ~ 80% @ 40°C, non-condensing
Vibration	0.5 Grms/ 5 ~ 500Hz/ operation (3.5" H.D.D) 1.5 Grms/ 5 ~ 500Hz/ no operation
Shock	10G peak acceleration (11 m sec. duration), operation 20G peak acceleration (11 m sec. duration), non-operation
Chassis Dimension (W x D x H)	16.93" x 18.7" x 1.73"(430mm x 475mm x 44mm)
I/O Interfaces	
Front Panel	Power LED x 1 Status LED x 1 HDD Active LED x 1 USB 3.0 Ports x 2 RJ-45 Console x 1 Parallel LCM display and 4 keypad x 1 Software Programmable Switch x 1
Rear Panel	AC Power Input x 1 Power Switch x 1 VGA port (Optional) Rear Expansion Slot X 1

Specifications

Platform	
Form Factor	1U Rackmount Network Platform
Processor	Intel® 8th Generation Core™/ Xeon® Processors
Chipset	Intel® C246
System Memory	DDR4 2133/2400/2666 UDIMM Up to 64GB 288-pin DIMM x 4
Network	
Ethernet	Intel® I350 AM2 Gigabit Ethernet x 2
Bypass	Depend on NIM module
NIM Slot	NIM Slot x3
Display	
Graphic Controller	Intel® Integrated
Connector	VGA cable (Optional)

Dimension

Unit: mm



Ordering Information

Part Number	CPU	Memory	Mini-Card Slot	Storage	LAN	USB	Console	Bypass	NIM Slot	Expansion Slot	TPM	Display	Fan	Mounting	Power
FWS-7830W2-H22-A10-000	Intel® 8th Generation Core™/Xeon® Processors	DDR4 UDIMM x 4, Up to 64GB	—	2.5" HDD Bay x 2 + mSATA slot x1	Intel® I350 AM2 Gigabit Ethernet x 2	USB 3.0 x 2	RJ-45 console x 1	—	3	PCIe [x8] X1 slot by riser card	—	—	2	1U Rackmount	ATX

* Please contact AAEON for other optional specifications.

Note 1: Need to configure riser card and module

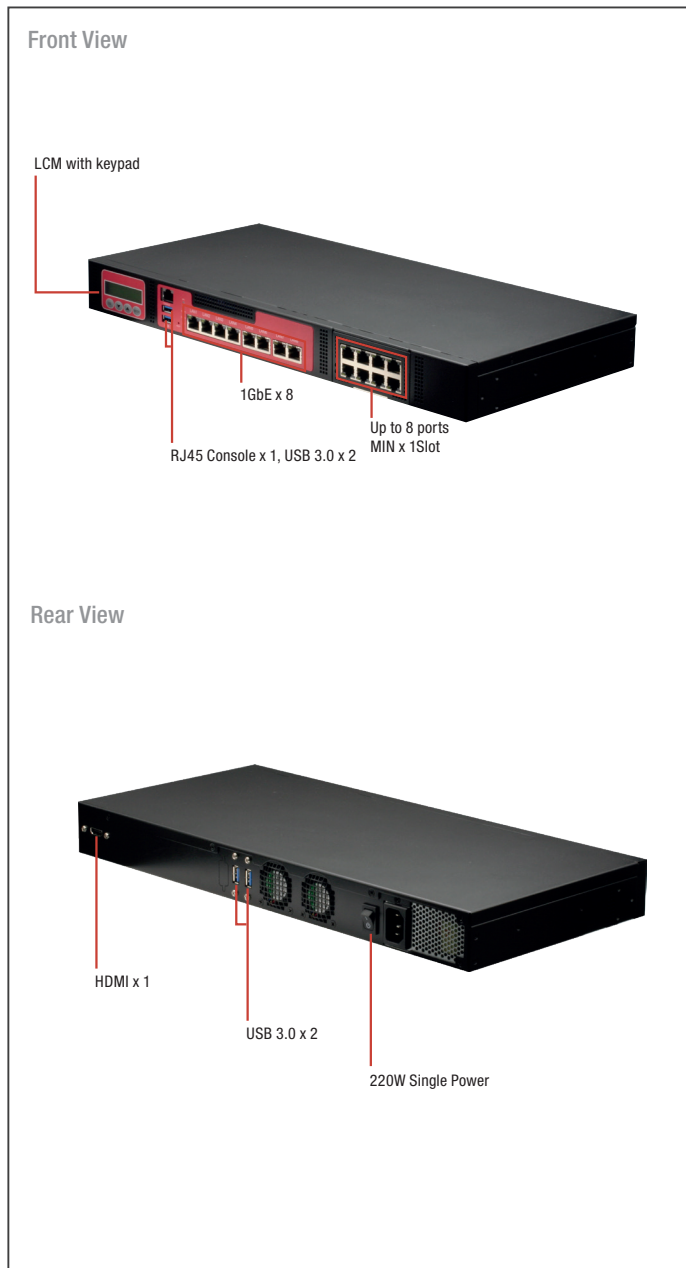
Packing List

- Console Cable
- Ear Brackets
- FWS-7830

Optional Accessories

- **M0266600**
Slide x 2, for Rackmount Usage
- **1702031803**
Power Cord, 3P-250V/10A, 180D, 1.8M, VDE, YP22/YP12
- **1702031802**
Power Cord, 3P-250V/10A, 180D, 1.8M, USA, YP22/YP12
- **170203180E**
Power Cord, 3P-25V/7A, 180D, 1.8M, PSE, YP12/YP12
- **9761781027**
VGA Cable
- **9761783000**
(TF)3.5x1 HDD Module, FWS-7830
- **9761783001**
(TF)2.5x2_HDD-LEFT Module, FWS-7830
- **PER-R30X-A10-00**
PER NIM Extension, Riser Card, REV1.0 for FWS-7830
- **NIM-S26C-A10-T40-0002**
Intel® Fortville XL710 PCI-Express 10G SFP+ 4 Ports Module for FWS-7820/7830
- **NIM-S26B-A10-F20-0002**
Intel® Fortville XL710 PCI-Express 40G QSFP 2 Ports Module for FWS-7820/7830
- **NIM-S13B-A10-G80-0002**
Intel® 82580EB PCI-Express 1G SFP 8 Ports Module for FWS-7820/7830
- **NIM-S13D-A10-G40-0002**
Intel® 82580EB PCI-Express 1G SFP 4 Ports Module for FWS-7820/7821/7830
- **NIM-C13B-A10-G82-0001**
Intel® 82580EB PCI-Express 1G Copper Ethernet 8 Ports Module for FWS-7820 w/ 2Pair bypass/7830
- **NIM-C13D-A10-G42-0002**
Intel® 82580EB PCI-Express 1G Copper Ethernet 4 Ports Module for FWS-7820 w/ 2Pair bypass/7830

1U Rackmount Intel® 8th Generation Platform Network Appliance



Features

- Dual Intel® 8th Generation Core™/Xeon™ processor
- Intel® Coffee Lake 2/6 Core (H310/C246)
- 2 x DDR4 SO DIMM/ECC Up to 32GB
- TPM Supported (Optional Request)
- LCM with Keypad x 1
- RJ-45 Console x 1, USB 3.0 x 2, HDMI x 1
- 220W ATX PSU
- Intel® i211 Gigabit Ethernet x 8 or Intel® i211 Gigabit Ethernet x 6 + SFP Ethernet ports x2
- Mini-Card (mSATA)



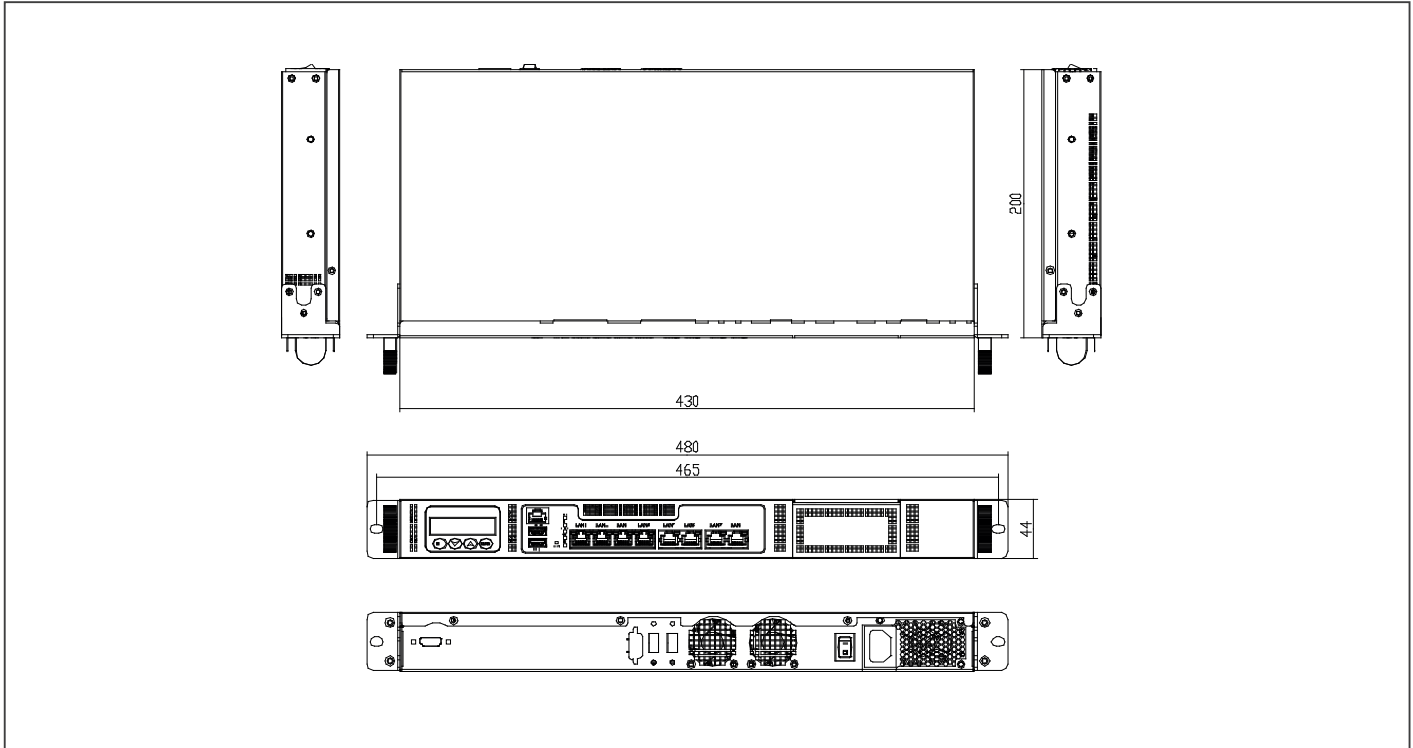
Display	
Graphic Controller	Intel® UHD Graphics 630
Connector	(HDMI x1 Optional)
Storage	
HDDs	Internal 2.5" HDD bay x 2 or (3.5" HDD bay x 1 can't use with NIM Optional)
CF/CFast/mSATA	mSATA
Expansion/Internal Interface	
PCIe slot	NIM Slot x1
Mini-PCIe slot	Mini-Card X1 (PCIe[x1]+mSATA)
IPMI	—
Keyboard and Mouse	NA
USB	USB 3.0 x 2
Miscellaneous	
RTC	Internal RTC
Watchdog Timer	1~255 steps by software programmable
Software Button	GPIO Programmable push button x 1
TPM	(TPM2.0 9665/TPM v1.2 9660 optional)
GPIO	4 bits input, 4 bits output
FAN	2
MTBF (Hours)	362,825 Hours
Color	Black
Environmental Parameters and Dimension	
Power Requirement	220W ATX PSU
Operation Temp.	32°F ~ 104°F (0°C ~ 40°C)
Storage Temp.	-4°F ~ 140°F (-20°C ~ 60°C)
Operating Humidity	10%~80% relative humidity, non-condensing
Storage Humidity	10%~80% @40°C; non-condensing
Vibration	0.5 g rms/ 5 ~ 500Hz / operation (2.5" Hard Disk Drive) 1.5 g rms/ 5 ~ 500Hz / non operation
Shock	TBD
Chassis Dimension (W x D x H)	16.93" x 7.87" x 1.73"(430mm x 200mm x 44mm)
I/O Interfaces	
Front Panel	Power LED x 1, Status LED x 1, HDD Active LED x 1 ,USB 3.0 Ports x 2 - RJ-45 Console x 1
Rear Panel	AC Power Input x 1, Power Switch x 1, (Rear Expansion Slot x 1 Optional)

Specifications

Platform	
Form Factor	1U Rackmount Network Platform
Processor	Intel® Xeon® processor E-2100 family for Intel® C246 Chipset Intel® Core™/ Celeron® processor for Intel® H310 Chipset
Chipset	Intel®C246/H310
System Memory	2 x DDR4 SO DIMM/ECC Up to 32GB DDR4 1600/1866/2133 SO DIMM/ECC Up to 32GB 260-pin DIMM x 2
Network	
Ethernet	Intel® i211 Gigabit Ethernet x 8 or Intel® i211 Gigabit Ethernet x 6 + SFP Ethernet ports x2 (C246) Intel® i211 Gigabit Ethernet x 6 (H310)
Bypass	2 Pairs
NIM Slot	1

Dimension

Unit: mm



Ordering Information

Part Number	CPU	Memory	Mini-Card Slot	Storage	LAN	USB	Console	Bypass	NIM Slot	Expansion Slot	TPM	Display	Fan	Mounting	Power
FWS-7831W8-H22-A10-000	Intel® 8th Generation Core™/ Xeon® Processors	2DDR4 S0 DIMM X2 / ECC Up to 32GB	Mini-Card x 1(Pcie[x1]+mSATA)	2.5" HDD Bay x 2	Intel® I211 Gigabit Ethernet x 8	USB 3.0 x 2	RJ-45 console x 1	2 Pairs	1	—	—	—	2	1U Rackmount	ATX

* Please contact AAEON for other optional specifications.
 Note 1: Need to configure riser card and module

Packing List

- Console Cable
- Ear Brackets
- FWS-7831

Optional Accessories

- **1702031803**
Power Cord, 3P-250V/10A, 180D, 1.8M, VDE, YP22/YP12
- **1702031802**
Power Cord, 3P-250V/10A, 180D, 1.8M, USA, YP22/YP12
- **170203180E**
Power Cord, 3P-25V/7A, 180D, 1.8M, PSE, YP12/YP12
- **9761783102**
HDMI Cable with screw
- **9761783000**
(TF)3.5x1 HDD Module, FWS-7830/7831
- **NIM-S26C-A10-T40-0002**
Intel® Fortville XL710 PCI-Express 10G SFP+ 4 Ports Module for FWS-7820/7830/7831
- **NIM-S26B-A10-F20-0002**
Intel® Fortville XL710 PCI-Express 40G QSFP 2 Ports Module for FWS-7820/7830/7831
- **NIM-S13B-A10-G80-0002**
Intel® 82580EB PCI-Express 1G SFP 8 Ports Module for FWS-7820/7830/7831
- **NIM-S13D-A10-G40-0002**
Intel® 82580EB PCI-Express 1G SFP 4 Ports Module for FWS-7820/7821/7830/7831
- **NIM-C13B-A10-G82-0001**
Intel® 82580EB PCI-Express 1G Copper Ethernet 8 Ports Module for FWS-7820 w/ 2Pair bypass/7830/7831
- **NIM-C13D-A10-G42-0002**
Intel® 82580EB PCI-Express 1G Copper Ethernet 4 Ports Module for FWS-7820 w/ 2Pair bypass/7830/7831