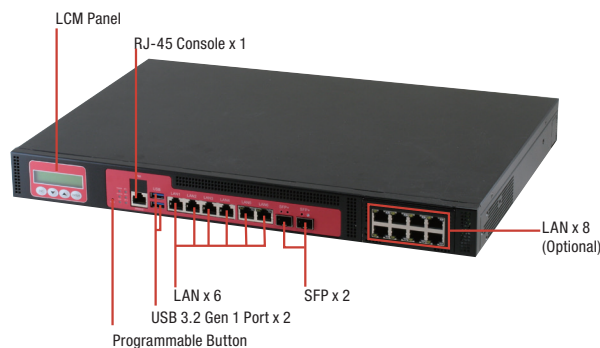
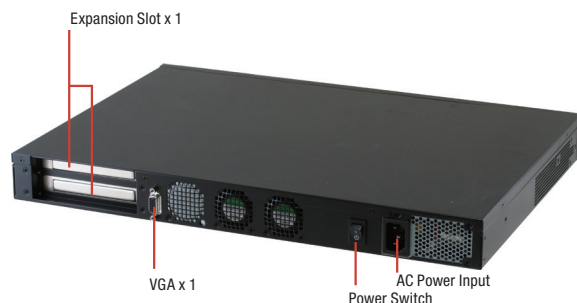


Front View



Rear View



## Specifications

System	
Form Factor	1U Rackmount Network Platform
Processor	6th/7th Generation Intel® Core™/ Xeon® processors
Chipset	Intel® C236
System Memory	DDR4 1600/1866/2133/2400 UDIMM/ECC Up to 64GB 288-pin DIMM x 4
Network	
Ethernet	Intel® i211 GbE x 6 + Intel® i210 GbE x 2 (SFP) + NIM x 1 (Or i211 GbE x 8 + NIMx1)UDIMM/ECC
Bypass	Onboard 2 pairs bypass, others depend on NIM module
NIM Slot	1
Display	
Graphic Controller	Intel® HD graphics integrated
Connector	VGA cable (Optional)

## Features

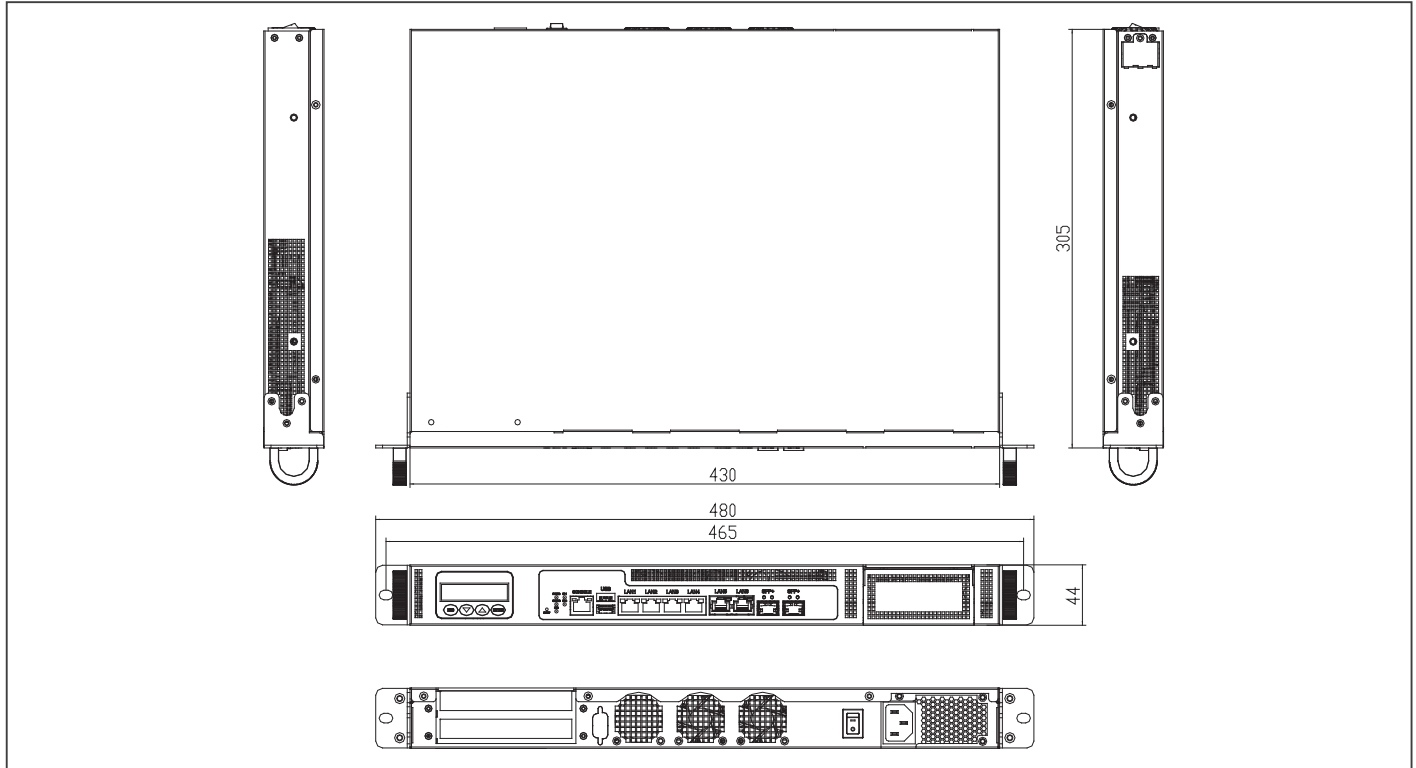
- 1U Rackmount Network Appliance
- Intel® LGA1151 6th/7th Generation Core™/Xeon Processors
- 288-pin ECC Dual Channel DDR4 2133 UDIMM x 4 Up to 64GB
- 10/100/1000Base-TX Ethernet Ports x 8 (Onboard RJ-45 x 6 & SFP x 2) with Max. 3 Pairs of LAN Bypass Function
- Internal 3.5" SATA HDD x 1 or 2.5" SATA HDD x 2 (Optional Extra 4 Pcs x 2.5" HDD without NIM and Expansion Lot Presented)
- CFast x 1 (Optional CF Socket or mSATA Slot)
- 8 bits GPIO (Default 4-bits Input, 4-bits Output)
- TPM Supported (Optional Request), RAID 0,1 Supported
- LCM with Keypad x 1, RJ-45 for Console x 1, USB 3.2 Gen 1 x 2
- 250W AC Type Power Input
- VGA Header x 1 (Optional VGA Cable)



Storage	
HDDs	Internal 2.5" SATA HDD x 2 or 3.5" SATA HDD x 1 (optional)
CF/CFast/mSATA	Optional BOM CFast™ socket or mSATA slot or CF™ socket (optional)
Internal/ Expansion Interface	
PCIe slot	Up to PCIe[x8] slot x 2
Mini-PCIe slot	Mini Card x 1
IPMI	—
Keyboard and Mouse	Pin-header
USB	USB 3.2 Gen 1 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	TPM v1.2 9660 (TPM2.0 9665 optional)
GPIO	4 bits input, 4 bits output
FAN	2
MTBF (Hours)	94,241
Color	Black
Environmental Parameters and Dimension	
Power Requirement	250W ATX PSU
Operating Temperature	32°F ~ 104°F (0°C ~ 40°C)
Storage Temperature	-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 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
Dimension (W X D X H)	16.93" x 12.01" x 1.73" (430mm x 305mm x 44mm)
I/O Interfaces	
Front Panel	Power LED x 1 Status LED x 1 HDD Active LED x 1 USB 3.2 Gen 1 Ports x 2 RJ-45 Console x 1 Parallel LCM display and 4 keypad x 1 (Optional w/ NIM slot) Software Programmable Switch x 1 Bypass LED X2 RJ45 X8 or RJ45 X6+SFPX 2
Rear Panel	AC Power Input x 1 Power Switch x 1 VGA port (Optional) Rear Expansion Slot x 2 (2 x PCIe [x8] slots, NIM slot will be disabled if PCIe Riser supported)

### Dimension

Unit: mm



### Ordering Information

Part Number	CPU	Memory	Storage	Display	LAN	USB	Console	Bypass	*NIM Slot	*Expansion Slot
FWS-7821W8-H25-A10-000	6th/7th Gen. Intel® Core™/Xeon	DDR4 ECC/UDIMM (Up to 64 GB)	2.5" HDD Bay x 2 + CFast™ Slot x 1	—	1 GbE x 6, 2 x 1G SFP	USB 3.2 Gen 1 x 2	RJ-45 x 1	2	1 (Note 1)	2 (Note 2)

\* Please contact AAEON for other optional specifications.

Note 1: Need to configure riser card and module

Note 2: Need to configure riser card

### Packing List

- Console Cable
- Ear Brackets
- FWS-7821

### Optional Accessories

- **M02666600**  
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
- **9761782100**  
(TF)2.5" x 2 HDD-LEFT Module, FWS-7821
- **PER-R40X**  
NIM LAN Module Riser Card
- **PER-R44X**  
2 Slot Rear PCIe Riser Card
- **PER-T354**  
1 Slot Rear PCIe Riser Card
- **NIM-S26C-A10-T40-0002**  
Intel® Fortville XL710 PCI-Express 10G SFP+ 4 Ports Module for FWS-7821
- **NIM-S26B-A10-F20-0002**  
Intel® Fortville XL710 PCI-Express 40G QSFP 2 Ports Module for FWS-7821
- **NIM-S13B-A10-G80-0002**  
Intel® 82580EB PCI-Express 1G SFP 8 Ports Module for FWS-7820
- **NIM-S13D-A10-G40-0002**  
Intel® 82580EB PCI-Express 1G SFP 4 Ports Module for FWS-7820/7821
- **NIM-C13B-A10-G82-0001**  
Intel® 82580EB PCI-Express 1G Copper Ethernet 8 Ports Module for FWS-7821 w/ 2Pair bypass
- **NIM-C13D-A10-G42-0002**  
Intel® 82580EB PCI-Express 1G Copper Ethernet 4 Ports Module for FWS-7821 w/ 2Pair bypass
- **NIM-S13E-A10-G42-0001**  
LAN Module, Intel® 82580EB, 4 x 1GSFP, 2 Bypass, SX short wave, REV. A1.0
- **NIM-S13E-A10-G42-0002**  
LAN Module, Intel® 82580EB, 4 x 1GSFP, 2 Bypass, LX long wave, REV. A1.0