



1U Rackmount Network Appliance with 12th/13th Generation Intel® Core™ Processors



## Features

- 1U Rackmount Network Appliance
- 12th/13th Generation Intel® Core™ Processors, Intel® W680 Chipset
- DDR5 U-DIMM x 4, up to 128GB (ECC)
- 2.5" SATA SSD x 2 (Optional 3.5" x 1), M.2 2280 M-Key x 1 (PCIe [x4])
- 10GbE SFP+ x 2 (Intel® X710-BM2 x 1), Optional: Up to RJ-45 x 24 via NIM x 3
- NIM Slot x 3
- HDMI x 1, RJ45 Console port x 1, USB 3.2 gen1 x 2
- Internal AC/DC 1U 300W Redundant PSU
- 430mm x 400mm x 44mm



Internal/ Expansion Interface	
PCIe Slot	—
Mini-PCIe Slot	M.2 2280 M-Key x 1 (PCIe [x4])
IPMI	—
Keyboard and Mouse	—
USB	USB 3.2 Gen 1 x 2
Miscellaneous	
RTC	Internal RTC
Watchdog Timer	1~255
Software Button	1
TPM	TPM 2.0 SPI
GPIO	Reserve internal pin header 8-bit Digital I/O interface (4-in /4-out)
Fan	Smart Fan x 3, optional system fan x 1
MTBF (Hours)	TBD
Color	Black
Environmental Parameters and Dimension	
Power Requirement	1U 300W Redundant PSU x 1
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	0%~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	10 G peak acceleration (11 m sec. duration), operation 20 G peak acceleration (11 m sec. duration), non operation
Dimension (W X D X H)	16.93" x 15.75" x 1.73" (430mm x 400mm x 44mm)
I/O	
Front Panel	10GbE SFP+ x 2 Power LED x 1 Status LED x 1 HDD Active LED x 1 USB 3.2 Gen 1 x 2 HDMI x 1 RJ-45 Console x 1 LCM display with keypad x 1 Software Programmable Button x 1 NIM Slot x 3
Rear Panel	AC Power Input x 1 Power Switch x1 Rear expansion slot x 1 (PCIe [x8]): Optional

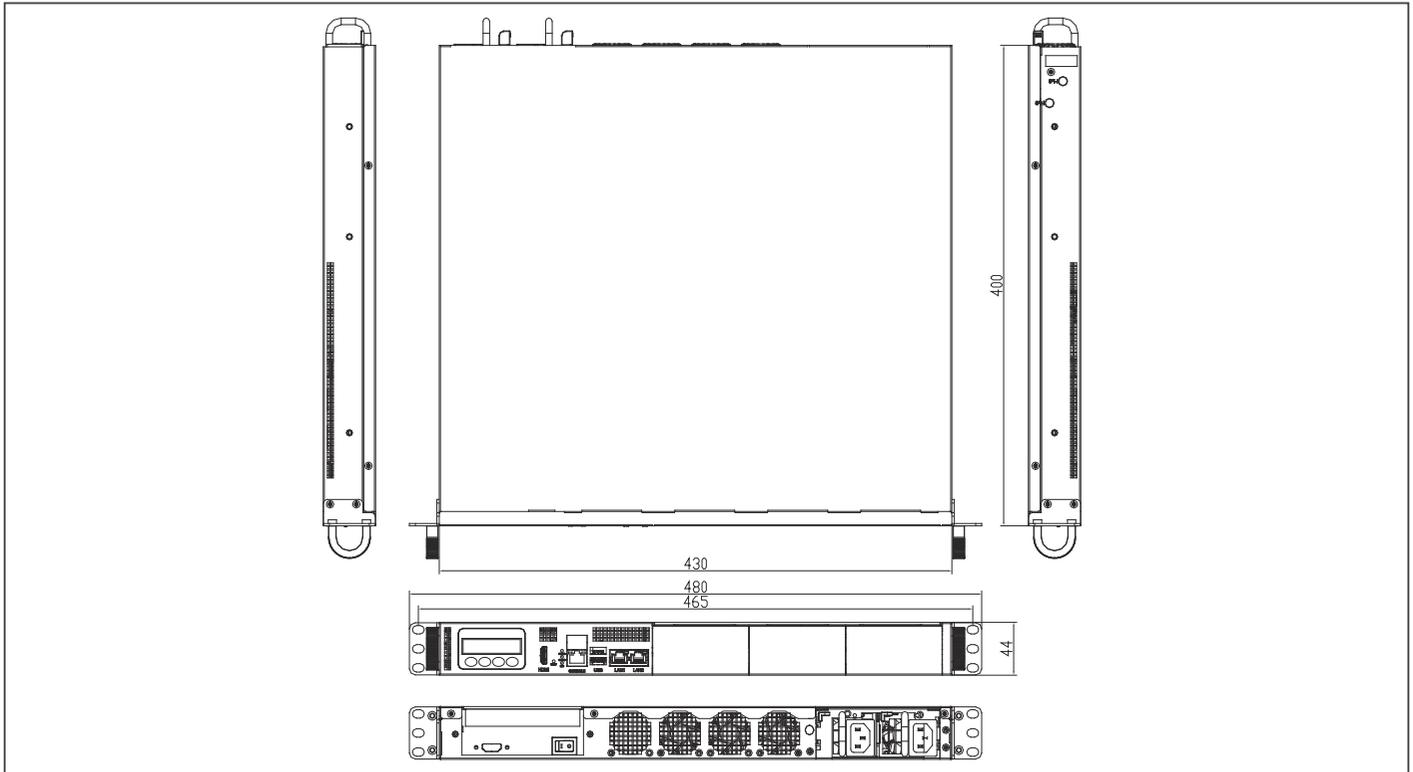
## Specifications

System	
Form Factor	1U Rackmount Network Appliance
Processor	12th/13th Generation Intel® Core™ Processors
Chipset	Intel® W680
System Memory	DDR5 U-DIMM x 4, up to 128GB (ECC)
Network	
Ethernet	10GbE SFP+ x 2 (Intel® X710-BM2 x 1)
Bypass	Dependent
NIM Slot	3
Display	
Graphic Controller	—
Connector	HDMI port x 1
Storage	
HDD	2.5" HDD Bay x 2
CF/CFast/mSATA	—



## Dimension

Unit: mm



## Ordering Information

Part Number	CPU	Memory	Mini-Card Slot	Storage	LAN	USB	Console	Bypass	NIM Slot	Expansion Slot	TPM	Display
FWS-7850-E2-A10-00	12th/13th Generation Intel® Core™ Processors	DDR5 UDIMM ECC x 4	M.2 2280 M-Key x 1 (PCIe [x4])	2.5" HDD Bay x 2	10Gb SFP+ x 2	USB 3.2 Gen 1 x 2	RJ-45 x 1	—	3	—	Onboard	HDMI x 1

## Packing List

- Console Cable
- Ear Brackets
- FWS-7850

## Optional Accessories

- **M02666600**  
Slide x 2, for Rackmount Usage
- **1702031803**  
Power Cord, 3P-250W/10A, 180D, 1.8M, VDE, YP22/YP12
- **1702031802**  
Power Cord, 3P-250W/10A, 180D, 1.8M, USA, YP22/YP12
- **170203180E**  
Power Cord, 3P-25V/7A, 180D, 1.8M, PSE, YP12/YP12
- **NIM-C15A-A10-G82-0001**  
Intel® I226V PCI-Express 2.5G Copper Ethernet 8 Ports Module for FWS-7851/7850 w/ 2Pair bypass
- **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
- **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