FWA-6500

Multi-Core™ x86 Intel® Xeon® Processor 5500 series based 2U Network Application Platform

Features

- Supports dual Intel® Xeon® processors 5500/5600 series with QPI up to 6.4 GTs
- Twelve DDR3 1066/1333 registered ECC memory up to 96 GB
- Four FRU modules by the PCI-express x8 gen.2 connectors
- FRU module includes 4-port RJ-45/SFP GE NIC module, 2-port SFP + 10GE NIC module and 8-port RJ-45/SFP GE NIC module
- Two PCI-E full-height/ half-length add-on cards
- Two 2.5" removable SATA HDD
- Supports remote management IPMI2.0 compliant

Introduction

Built upon functionality and capability, the FWA-6500 system provides the high performance and feature set required for dual processor-based high-end network communication appliances with configuration options optimized for intensive computing, high energy-efficiency and high speed I/O bandwidth. The Intel® Xeon Dual/Quad-Core™ processors are based on the Intel® QuickPath Interconnect architecture and VT technology improve the performance in a virtual environment. The technology supports DDR3 1066/1333 Registered ECC memory with the memory controller embedded in the processor.

The chipset consists of the Intel® 5520 IO Hub (IOH), Intel® I/O Controller Hub (ICH10R) and the I/O subsystem. The Intel® 5520 IOH provides 36 PCI-E Gen2 lanes and the ICH10R provides 6 x PCI-E Gen1 lanes. Therefore, the FWA-6500 can provide flexible and different combinations of Ethernet modules such as 4-port RJ-45/SFP GE NIC modules, 2-port SFP+ 10GE NIC modules and 8-port RJ-45/SFP GE NIC modules. in the front. In addition, the FWA-6500 can support standard PCI-express expansion slots with a riser card.
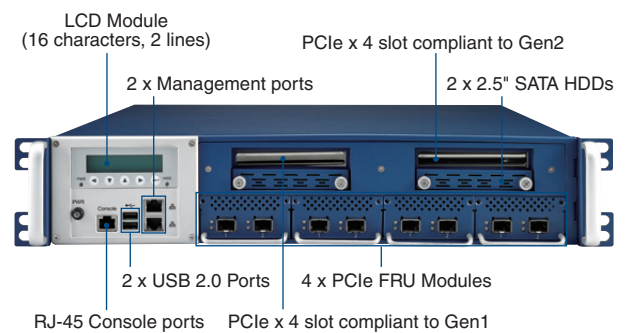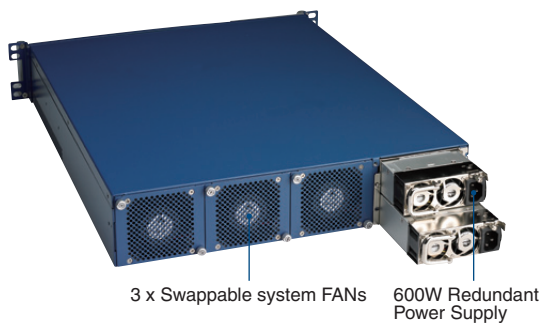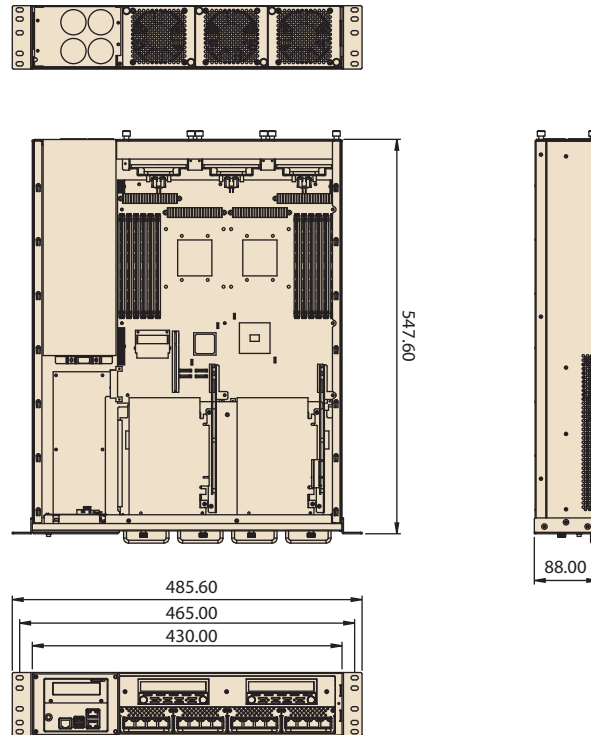
The FWA-6500 is optimized for space constrained installations. The FWA-6500 can support two 2.5" SATA hard disk drives and still have space to support 2 PCI-E add-on cards in front for external access. The front panel also has one RJ-45 type serial port, two Gigabit Ethernet management ports, two USB ports and an LCD Module for local system management, maintenance, and diagnostics. The system is FCC, UL, CE, CCC and RoHS compliant.

Specifications

Processor	CPU	2 x Intel Xeon Dual/Quad-Core processors	
	Max. Speed	Intel Xeon Processor 5500/5600 series with QPI up to 6.4GT/s	
	L2 Cache	4 MB/8 MB	
Memory	Technology	DDR3 1066/1333 MHz ECC registered memory	
	Capacity	Up to 96 GB with 12 DIMM	
PCIe	Chipset	Intel 5520 + Intel ICH10R	
	Expansion Slot	4 x PCIe x8 slots connect to NMC module 2 x PCIe x4 slots for riser card 1 x PCIe x4 slot for management board	
	Riser Card	2 x PCIe x4 riser cards Supports full-height/half-length cards and external access	
Ethernet	Management Port	2 x Intel 82574E 10/100/1000 Mbps Ethernet	
	NMC Module	4 x NMC modules	
	Gigabit Ethernet	Copper module includes 4 x Gigabit Ethernet ports with Intel 82576 Ethernet controller by RJ-45 interface with LAN bypass Fiber module includes 4 x Gigabit Ethernet ports with Intel 82576 Ethernet controller by SFP interface	
	10GE Module	Intel 82599ES 10GE controller Supports 2-port 10GE by SFP+ interface	
Storage	SATA	2 x 2.5" Hot-swappable SATA hard drive in the front	
	Compact Flash	1 x CF Socket	
Remote Management	IPMI	Hitachi H8 BMC	
Peripheral	USB	2 x USB 2.0 ports in the front	
	Serial	1 x RJ-45 console port connector in the front	
	LCD Module	1	
Power	Watts	600W 2U (1+1 redundant, 600W each)	
	Input	AC 100 ~ 240 V @ 50 ~ 60 Hz, full range	
Environment		Operating	Non-Operating
	Temperature	0 ~ 40° C (32 ~ 104° F)	-20 ~ 75° C (-4 ~ 167° F)
	Humidity	5 ~ 85% @ 40° C (104° F)	5 ~ 95%
Physical Characteristics	Dimensions (W x H x D)	430 x 88 x 547.6 mm	
	Weight	18 kg (40 lb)	

Dimensions

Unit: mm

547.60

88.00

485.60
465.00
430.00

LCD Module
(16 characters, 2 lines)

PCIe x 4 slot compliant to Gen2

2 x Management ports

2 x 2.5" SATA HDDs

3 x Swappable system FANs

600W Redundant
Power Supply

2 x USB 2.0 Ports

4 x PCIe FRU Modules

RJ-45 Console ports

PCIe x 4 slot compliant to Gen1

Ordering Information

Part Number	Description
FWA-6500CRE	FWA-6500 Base System + 4 x 4-port GE RJ45 Module, Up to 16ports GE
FWA-6500BE	FWA-6500 Base system
NAEM-0102E	4-port GE SFP Module w/o LAN bypass
NAEM-0103E	4-port GE RJ45 Module w/ LAN bypass
NAEM-1001E	2-port 10GE SFP+ Module

* Advantech may make changes to specifications and product descriptions at any time, without notice.

Accessories

Part Number	Description
1702002600	3P 180 cm, USA
1702002605	3P 180 cm, Europe
1702031801	3P 180 cm, UK
1700000237	3P 180 cm, JP

Packing List

Part Number	Description
1700002463	Cable RJ-45 to Console 9P 220 cm T