

### KEY FEATURES

- AMC.1 compliant
- PCIe Gen2 x8 lanes
- Quad SFP+
- 10Gb/s full duplex bandwidth
- TCP Segmentation off load: up to 256KB
- Jumbo Frames of up to 15.5KB
- IPV6 Support for IP/TCP
- Dynamic Interrupt moderation
- Eight VLAN L2 Filters
- 16 Flex L3 Port Filters
- Four L3 Address Filters (IPV4)
- Four L3 Address Filters (IPV6)
- IEEE P802.1AE LinkSec
- OS support for:
  - Linux
  - Windows
  - Solaris

The AMC231 is a single-width, mid-height AdvancedMC™ (AMC) based on the AMC.1 specification (full-height option available). The AMC231 provides Quad 10 Gigabit Ethernet via front panel SFP+.

The AMC231 supports IEEE802.1AE LinkSec Specifications. The module can off-load IPsec for up to 1024 Security Associations (SA) for each TX and RX.

The AMC231 provide wire speed Quad-port 10GbE throughput. The module reduces end-to-end latency for high priority traffic. In order to enhance the CPU utilization, the module supports Receive Side Coalescing (RSC).

The AMC231 supports the IEEE P802.1AE LinkSec specification. It incorporates an in-line packet crypto unit, off-load IPsec for up to 1024 Security Associations (SA), AH and ESP protocols for authentication and encryption, AES-128-GMAC and AES-128-GCM.

VadaTech can modify this product to meet special customer requirements without NRE (minimum order placement is required).

**AdvancedMC™**

# AMC Quad-Port 10GbE with SFP+

## SPECIFICATIONS

Architecture		
Physical	Dimensions	Single-Width, Mid-Height Front Panel (option for full-height)
		Width: 2.89 in. (73.5 mm)
		Depth: 7.11 in. (180.6 mm)
Type	AMC Serial	10GbE
		Quad-port
		10 Gb/s per port
Standards		
AMC	Type	AMC.1
Module Management	IPMI	IPMI Version 2.0
PCIe	Lanes	x4 or x8
	Gen	Gen2 (each lane at 5.0Gb/s)
Configuration		
Power	AMC231	14W
Environmental	Temperature	Operating Temperature: 0° to 65° C (Air flow requirement is to be greater than 200 LFM)
		Storage Temperature: -40° to +90° C
	Vibration	1G, 5-500Hz each axis
	Shock	30Gs each axis
Front Panel	Relative Humidity	5 to 95 percent, non-condensing
	Interface Connectors	Quad SFP+
	LEDs	IPMI Management Control
		Activity
Mechanical	Hot Swap Ejector Handle	
Software Support	Operating Systems	Linux, Windows, Solaris and VxWorks
Other		
MTBF	MIL Handbook 217-F > TBD Hrs.	
Certifications	Designed to meet FCC, CE and UL certifications where applicable	
Standards	VadaTech is certified to both the ISO9001:2000 and AS9100B:2004 standards	
Compliance	RoHS and NEBS	
Warranty	Two (2) years.	
Trademarks and Logos	The VadaTech logo is a registered trademark of VadaTech, Inc. Other registered trademarks are the property of their respective owners. AdvancedMC™ and the AdvancedTCA™ logo are trademarks of the PCI Industrial Computers Manufacturers Group. All rights reserved. Specification subject to change without notice.	

# AMC Quad-Port 10GbE with SFP+

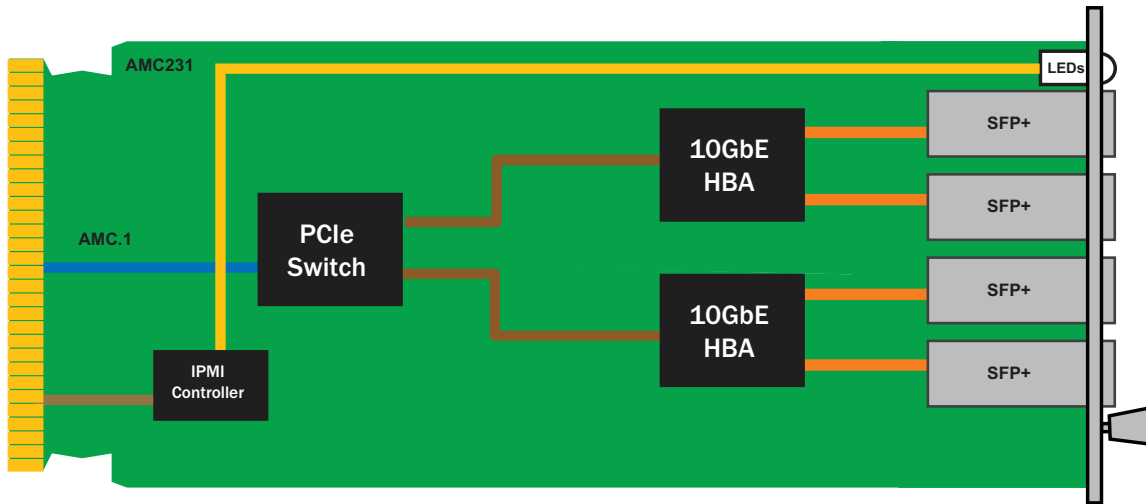


FIGURE 1. AMC231 Functional Block Diagram

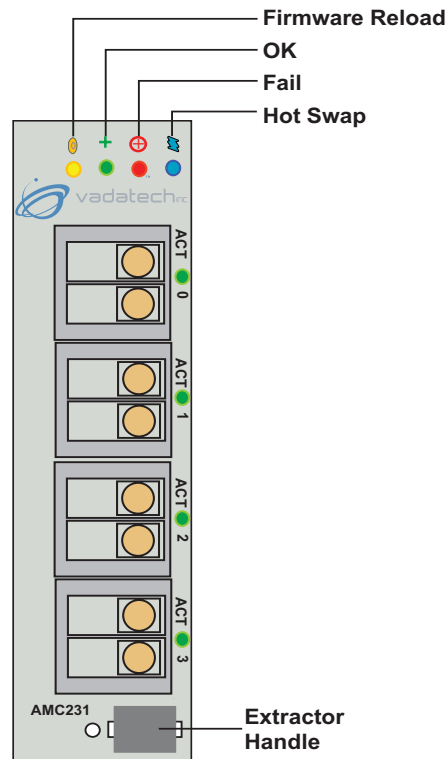


FIGURE 2. AMC231 Front Panel

## ORDERING OPTIONS

### AMC231 - ABC - 000 - OHJ

#### A = PCIe Gen2

- 1 = x4
- 2 = x8

#### B = SFP+ Transceivers

- 0 = None
- 1 = 10GBASE-SR
- 2 = Reserved
- 3 = 10GBASE-LRM
- 4 = 10GBASE-LR

#### C = Front Panel Height

- 1 = Reserved
- 2 = Mid-Height
- 3 = Full-Height

#### H = Operating Temp

- 0 = Commercial (0° to +65°)
- 1 = Industrial (-20° to +70°)
- 2 = Military (-40° to +80°)

#### J = Conformal Coating

- 0 = None
- 1 = Humiseal 1A33 Polyurethane
- 2 = Humiseal 1B31 Acrylic

