

KEY FEATURES

- AMC.2 compliant
- Managed Layer two switch
- Six 10/100/1000Mbit ports
- Front panel I/O via RJ-21
- Two GbE routed to the rear
- Support up to 8K MAC address
- 4K IEEE 802.1Q VLANs
- VLAN-based packet filtering
- Packet classification using IEEE802.1p QoS
- 9K Jumbo frames
- Spanning tree
- Mirroring
- QoS
- SNMP and RMON
- OS support for:
 - OS independent

The AMC218 is a single-width, mid-height AdvancedMC™ (AMC) based on the AMC.2 specification (full-height option available). The AMC218 provide six front panel 10/100/1000Mbit ethernet ports via RJ-21. It has two additional GbE ports that are routed to the rear per the AMC.2 specification.

The switch is managed via http and supports a rich set of features such as VLAN, Spanning tree, QoS, Mirroring, etc.

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

AdvancedMC™

8 Port AMC Managed Layer Two Switch

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 Ethernet	GbE switch
		Eight ports
		1 Gb/s per port
Standards		
AMC	Type	AMC.2
Module Management	IPMI	IPMI Version 2.0
1000BASE-BX	Ports	0 and 1
Configuration		
Power	AMC218	7W
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
	Relative Humidity	5 to 95 percent, non-condensing
Front Panel	Interface Connectors	RJ-21
	LEDs	IPMI Management Control
		Activity
	Mechanical	Hot Swap Ejector Handle
Software Support	Operating Systems	Independent
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.	

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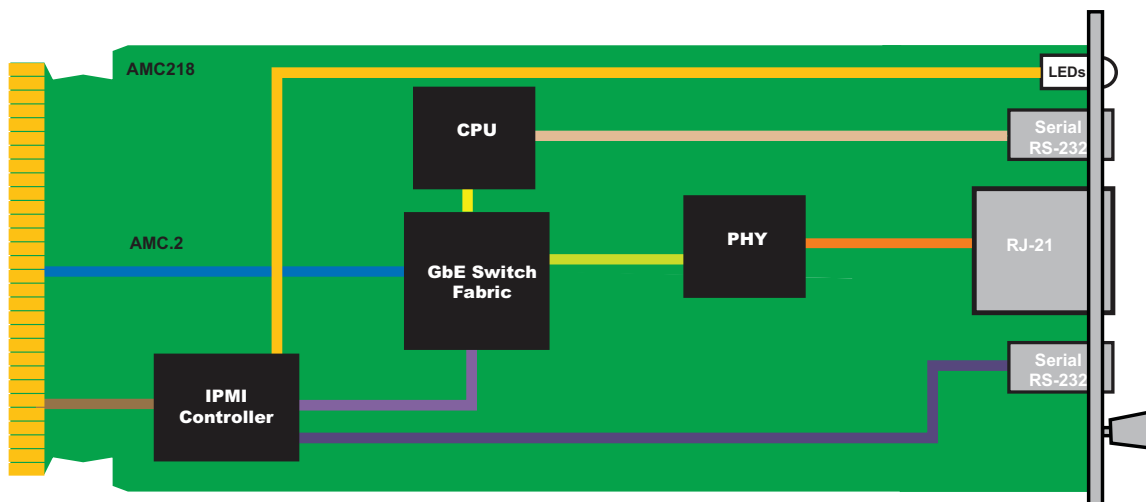
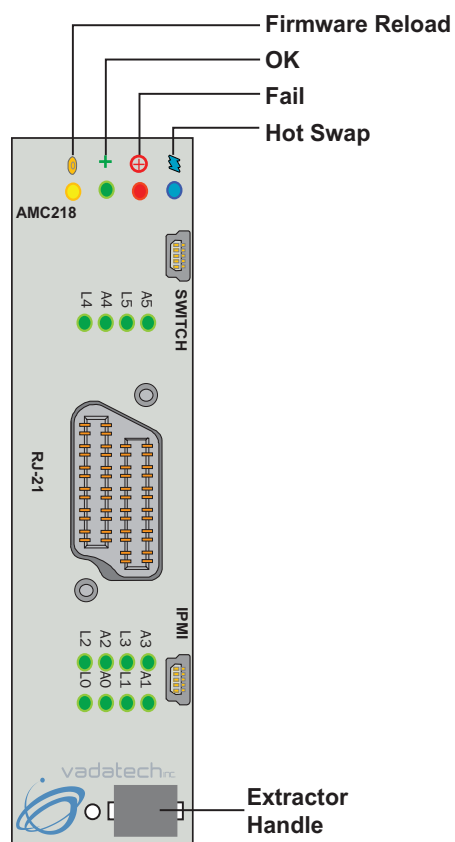


FIGURE 1. AMC218 Functional Block Diagram

FIGURE 2. AMC218 Front Panel



8 Port AMC Managed Layer Two Switch

Managed Layer Two GbE

The GbE layer two managed switch fabric routes six GbE to front panel and two to the rear.

Key features:

- ❖ Configuration
 - ◆ Ethernet/IEEE 802.3 Packet size (64 bytes to 1522 bytes)
 - ◆ Jumbo packets up to 9216 bytes
- ❖ L2 Switching
 - ◆ Supports up to 8K MAC address
 - ◆ Line rate switching for all packet sizes
 - ◆ Independent VLAN learning
 - ◆ VLAN flooding for broadcast and DLF packets
 - ◆ Hardware-based address learning
 - ◆ Six CPU-managed learning (CML) modes per port
 - ◆ Hardware-and-software-based aging
 - ◆ Software insertion/deletion/lookups of the L2 table
 - ◆ Same port bridging supported
 - ◆ Station movement control
- ❖ L2 Multicast
 - ◆ 4K VLANs
 - ◆ Protocol-based VLANs
 - ◆ IEEE 802.1p
 - ◆ IEEE 802.1Q
 - ◆ Independent VLAN learning (IVL)
 - ◆ Ingress filtering for IEEE 802.1Q VLAN security
 - ◆ VLAN-based packet filtering
 - ◆ MAC-based VLAN
- ❖ Source Port Filtering
 - ◆ Egress port block masks
 - ◆ Trunk group blocking masks
- ❖ Storm Control Per-Port:
 - ◆ Unknown unicast packet rate control
 - ◆ Broadcast packet rate control
 - ◆ Multicast packet rate control
- ❖ Spanning Tree:
 - ◆ IEEE 802.1D spanning tree protocol (single spanning tree per port)
 - ◆ IEEE 802.1s for multi spanning trees
 - ◆ IEEE 802.1w rapid spanning tree protocol-delete and/or replace per:
 - Port
 - VLAN
 - Port, per VLAN
 - ◆ Spanning tree protocol packets detected and sent to the CPU
- ❖ Double-Tagging:
 - ◆ Unqualified learning/forwarding
 - ◆ IEEE 802.1 Q-in-Q
- ❖ Mirroring
 - ◆ Ingress/egress mirroring support
 - ◆ Mirror-to-port receives the unmodified packet for ingress mirroring
 - ◆ Mirror-to-port receives the modified packet for egress mirroring
- ❖ Content Aware Filter Processing
 - ◆ Intelligent Protocol Aware processor with backward-compatible, byte-based classification option
 - ◆ Parses up to 128 bytes per packet
 - ◆ -512 ACL rules support
 - ◆ Multiple matches and actions per packet
 - ◆ ACL-based policing
 - ◆ Ingress/egress port based filtering
 - ◆ MAC destination address remarking
 - ◆ Traffic class definition based on the filter
 - ◆ Programmable meters allows policing of flows
 - ◆ Metering granularity from 64 Kbps to 1Gbps
 - ◆ Multiple look-ups per packet
 - ◆ Metering support on ingress ports and CPU queues
- ❖ QoS Features
 - ◆ Four CoS queues per port
 - ◆ Per-port, per CoS drop profiles
 - ◆ Port level shaping
 - ◆ Traffic shaping available on CPU queues
 - ◆ Programmable priority to CoS queue mapping
 - ◆ Provides two levels of drop precedence per queue
 - ◆ Strict Priority (SP), Weighted Round Robin (WRR), and Deficit round Robin (DRR) mechanisms for shaped queue selection
- ❖ DSCP
 - ◆ DSCP-based prioritization
 - ◆ Back pressure metering
 - ◆ DSCP to IEEE 802.1p mapping
- ❖ Port Security
 - ◆ Per port blocking
 - ◆ Supports IEEE 802.1x
 - ◆ MAC address blocking
- ❖ DoS Prevention
 - ◆ Denial of Service detection/prevention
- ❖ Management Information Base
 - ◆ SMON MIB, IETF RFC 2613
 - ◆ RMON statistics group, IETF RFC 2819
 - ◆ SNMP interface group, IETF RFC 1213, 2836
 - ◆ Ethernet-like MIB, IETF RFC 1643
 - ◆ Ethernet MIB, IEEE 802.3u
 - ◆ Bridge MIB, IETF RFC 1493

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ORDERING OPTIONS

AMC218 - 00C - 000 - 00J

J = Conformal Coating

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

C = Front Panel Height

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



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