Admas8212G-M12-12GT

12-Port Layer 3 Gigabit Managed Wall Mount M12 Industrial Ethernet Switch

- Support 12 Gigabit copper ports with M12 connectors

- Support redundancy protocols like MW-Ring, EAPS, ERPS, STP/RSTP/MSTP to enhance network reliability

- Support static routing, RIPv1/v2, OSPF dynamic routing protocols for routing selection and packet forwarding

- Support multiple power input options such as DC24, DC48, DC110

- High-strength aluminum alloy housing, IP50 protection , fanless heat dissipation design, working temperature from -40°C to +70°C

CE FC RoHS ⚙ IP50

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Product Description

Admas8212G-M12-12GT is a layer 3 full Gigabit managed wall-mount industrial Ethernet switch. It supports 12 Gigabit copper ports with M12 connectors, meeting the standards required by the rail transportation industry, ensuring a secure and robust connection suitable for scenarios with strong vibrations.

This product adopts a store-and-forward mechanism, offering powerful bandwidth processing capabilities, automatically detecting packet errors, reducing transmission failures, and easily supporting Gigabit networking to ensure stable, reliable, and efficient data transmission. The product features industrial-grade components, high-standard system design, and production control. It is designed for wall-mount installation, with a high-strength aluminum alloy housing that is rugged and durable. It utilizes fanless heat dissipation, allowing it to operate reliably in a wide temperature range from -40 ℃ to +70 ℃.

With high-standard industrial protection design, it can adapt to various harsh working environments, providing stable communication performance. Admas8212G-M12-12GT follows the main communication standards in the industrial field, meeting requirements for communication real-time capabilities and network security.

The product offers various management options, such as accessing the switch's command-line (CLI) through the CONSOLE port or TELNET/SSH protocols, accessing the switch's web interface via HTTP/HTTPS, and accessing device MIB via SNMP protocol.

It supports a variety of network protocols and industry standards, including RIP, OSPF, VRRP, PIM, EAPS, ERPS, STP/RSTP/MSTP, VLAN, QoS, LACP, IGMP, IGMP Snooping, GMRP, LLDP, 802.1X, ACL, DHCP, SNTP, port mirroring, Ping, Tracert, and more.

⊛ Features and Benefits

- Support broadcast, multicast, and unknown unicast packet storm suppression, as well as broadcast and multicast packet storm detection to prevent broadcast storms.
- Support both static and dynamic link aggregation using LACP, which can increase transmission bandwidth, improve link reliability, and achieve network load balancing.
- Support 802.1Q VLAN, providing Access, Trunk, and Hybrid interfaces for easy segmentation of multiple broadcast domains, enhancing network security.
- Allow VLAN segmentation based on port, MAC, protocol, IP subnet, and more, making it suitable for different network environments.
- Support the GVRP protocol for dynamic distribution, registration, and propagation of VLAN attributes, maintaining dynamic VLANs.
- Feature MAC address table with aging time limits and supports static unicast/multicast MAC address binding to interfaces, ensuring the use of legitimate users.
- Support multicast protocols such as PIM, IGMP, GMRP, and IGMP Snooping, reducing multicast data broadcast in the network and saving network resources.
- Support LLDP (Link Layer Discovery Protocol) for obtaining information about LLDP neighbor devices, monitoring link status, and facilitating topology management and fault localization.
- Support ERPS (Ethernet Ring Protection Switching) for Ethernet multiple-ring protection technology, providing multiple-ring networking, link backup, rapid convergence, and improved network stability.
- Support EAPS (Ethernet Automatic Protection Switching) ring protection protocol and MW-RingV2 private ring network protocol, enhancing system communication reliability.
- Support STP (Spanning Tree Protocol), RSTP (Rapid Spanning Tree Protocol), and MSTP (Multiple Spanning Tree Protocol) for generating tree topologies, eliminating network loops, and improving network reliability.
- Support VRRP (Virtual Router Redundancy Protocol) to combine multiple router devices into a virtual router, achieving redundancy and backup.
- Support IPv4 static routing configuration, RIPv1/v2, OSPF dynamic routing protocols for routing selection and packet forwarding.
- Provide HTTP, HTTPS, TELNET, and SSH network access methods, with SSH providing secure remote login.
- Support SNMPv1/v2c/v3, enabling information querying, modification, and troubleshooting through MIB network management systems for centralized management.
- Implement QoS (Quality of Service) to prioritize the transmission of voice, video, and critical data in network devices, addressing network congestion.
- Support ACL (Access Control List) for filtering TCP/UDP/ICMP/IGMP and other packets based on source/destination IP and MAC addresses.
- Provide 802.1X port authentication for verifying the identity of access users and controlling access permissions.
- Include a DHCPv4 server for centralized dynamic management and configuration of user IP addresses.

Software	
Switching	Support port configuration, port rate limiting, storm suppression, storm detection, static port aggregation, and LACP Support 802.1Q VLAN for VLAN segmentation and provides options for segmentation based on port, MAC address, subnet, and protocol. It also support GVRP and port isolation Feature MAC address aging, static MAC address forwarding and filtering, as well as MAC address binding and learning restrictions
Redundancy	Supports MW-RingV2 private ring network technology. Supports EAPS, ERPS Supports STP, RSTP, and MSTP
Multicast	Support MW-RingV2 private ring network technology Support EAPS, ERPS Support STP/RSTP/MSTP
Routing	Support static routing Support dynamic routing protocols including RIPv1/v2 and OSPF Support VRRP
Security Management	Support access methods such as HTTP, HTTPS, TELNET, and SSH for configuring and managing the device remotely. Support ACL for filtering data at Layer 2 to Layer 4 based on source/destination IP and MAC addresses, as well as other criteria. Support 802.1X port authentication and MAC address authentication for controlling access and ensuring security. Support loopback detection and alarms for identifying and alerting network loop issues
Management and Maintenance	Support DHCP in various roles including Client, Server, Relay, and Snooping for IP address management Provide QoS features for prioritizing and managing the transmission of voice, video, and critical data to resolve network congestion Support SNMP versions 1, 2c, and 3, as well as SNMP traps for network monitoring and management. It also supports LLDP for discovering and monitoring neighboring devices Offer port mirroring, Ping, and Tracert functionalities for network troubleshooting and monitoring Provide user access control and management, system logs, synchronization of local time settings, and SNTP for network time synchronization Support online restart, factory reset, system upgrades, and configuration file upload/download Offer centralized management through unified upper-level software
Switch Capability	
Processing Type	Store-and-Forward
Backplane Bandwidth	24Gbps

Specification

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Buffer Size	3Mbit
MAC Table Size	16K
Interface	
1G Copper Port	12*10/100/1000Base-T(X) with auto-sensing copper ports Utilize M12 (A-Code 8-Pin Female) connectors Support both full-duplex and half-duplex communication modes Auto MDI/MDI-X
Relay	1 relay alarm output with an M12 (A-Code 4-Pin Female) port
CONSOLE	1 CONSOLE port, RS232 signal M12(A-Code 4-Pin Female) connector , used for device debugging and command-line configuration
Status LED	Power indicator, Operation indicator, Alarm indicator, Port indicator
Power Supply	
Input Voltage	DC18~36V, DC36~72V or DC50~160V(optional)
Power Consumption	＜15W(full load)
Connection	M12 (A-Code 4-Pin Male) port
Physical Characteristics	
Dimensions	180×170×50.5 mm
Installations	Wall mount
Weight	1.4kg
Working Environment	
Operating Temp	-40℃~+70℃
Storage Temp	-40℃~+85℃
Relative Humidity	5%~95% (non-condensing)
Industry Standard	

☑ Specification

EMC	IEC 61000-4-2 (ESD): Contact discharge ±8kV, Air discharge ±15kV IEC 61000-4-5 (Surge): Power supply and network port: Common mode ±2kV, Differential mode ±2kV IEC 61000-4-4 (EFT): Power supply: ±2kV; Communication port: ±2kV
Certification	CE, FCC, RoHS

⬇ Dimensions

Unit: mm
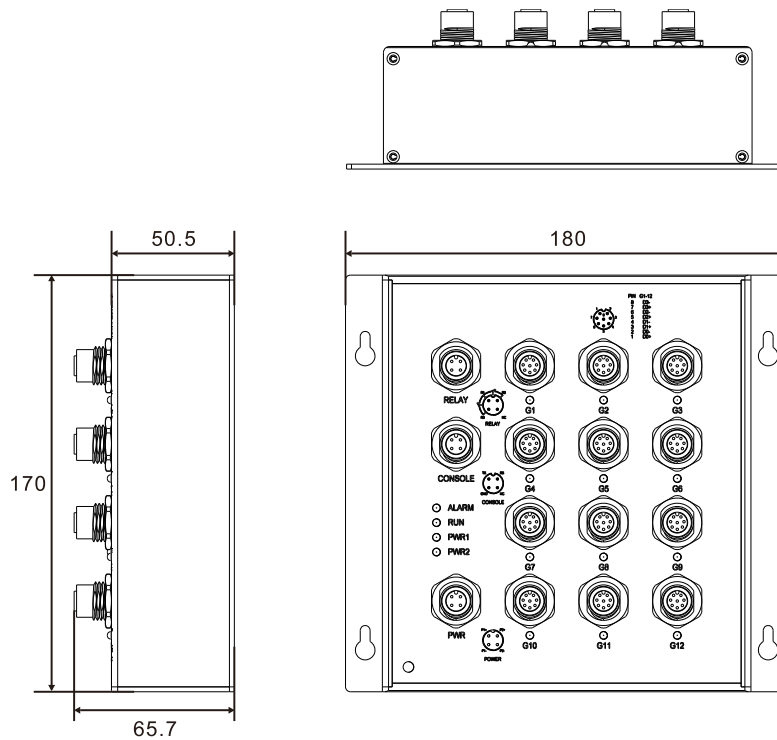
Ordering Information

Standard Model	1G Copper Port	Input Voltage
Admas8212G-M12-12GT-DC24	12	DC18~36V
Admas8212G-M12-12GT-DC48	12	DC36~72V
Admas8212G-M12-12GT-DC110	12	DC50~160V

Contact Us

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