MISCOM7028-4GC-AD220

28-Port Layer 2 Gigabit Managed Rack Mount Industrial Ethernet Switch



- 4×Gigabit combo ports, 24×10/100Base-T(X) ports (RJ45 connector)
- Support MW-Ringv1/v2, ERPS, STP/RSTP, and other ring network redundancy protocols to enhance network reliability
- Fast ring network redundancy less than 20ms (MW-Ringv1/v2) to improve the reliability of system communication
- Support DDM (Digital Diagnostics Monitoring) for monitoring the current DDM SFP optical module's working temperature, voltage, current, transmit optical power, and receive optical power
- Support single or dual AC85~264V/DC110~370V power supply optional
- With IP40 high-strength aluminum alloy enclosure and fanless design, the device can reliably operate in the temperature ranging from -40°C to +75°C
- Complies with IEC 61850-3.

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Product Description

MISCOM7028-4GC-AD220 is a layer 2 managed rack mount industrial Ethernet switch. It supports 4×Gigabit combo ports and 24×10/100Base-T(X) ports, utilizing a store-and-forward mechanism. This switch boasts a robust bandwidth processing capability, automatically detects packet errors, reduces transmission failures, and ensures stable, reliable, and efficient data transmission. The product is carefully selected with industrial-grade components, features a high-standard system design and production control, and is designed for 19-inch 1U rack installation. It has a high-strength aluminum alloy enclosure, making it sturdy and durable, with fanless heat dissipation, allowing it to operate in a wide temperature range from -40°C to +75°C. It also has a high-standard industrial protection design, making it adaptable to various harsh working environments, ensuring stable communication performance.

MISCOM7028-4GC-AD220 supports WEB management functions and various network protocols, such as MW-Ring v1/v2, ERPS, STP/RSTP, VLAN, LACP, IGMP-Snooping, LLDP, SNMPv1/v2c/v3, RMON, QoS, ACL, 802.1X authentication, WEB/TELNET/SSH access control, port aggregation, port mirroring, static MAC address binding, network diagnostics, loopback detection, email logs, alarms, and firmware online upgrades, and others. These features enhance network performance, reliability, and security, meeting the requirements of complex networks. The product has undergone rigorous testing for functionality, high and low temperatures, safety standards, and EMC compliance, making it suitable for a wide range of applications in complex networks and demanding industrial environments, including comprehensive energy, smart cities, rail transit, intelligent transportation, smart factories, and industrial automation, and other fields.

Features and Benefits

- Support rate limiting for broadcast, unknown multicast, and unknown unicast packets, as well as detection of broadcast and multicast packet storms to prevent network storms
- Support static link aggregation and LACP dynamic link aggregation to increase transmission bandwidth and enhance link reliability
- Support port mirroring to capture data at port entrances and exits for network detection and fault management
- Support 802.1Q VLAN to provide Access, Trunk, and Hybrid interfaces for dividing multiple broadcast domains, enhancing network security
- Support IGMP snooping to establish a layer 2 multicast forwarding table, reducing multicast data broadcasting in the network and saving network resources
- Support LLDP (Link Layer Discovery Protocol) for obtaining LLDP neighbor device information, monitoring link status, 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 RSTP (Rapid Spanning Tree Protocol) and compatible with STP (Spanning Tree Protocol) to eliminate network loops and enhance network reliability
- Support SNMPv1/v2c/v3 centralized management and SNMPv1/v2c/v3 TRAP messages, including support for standard and private TRAPs
- Support RMON (Remote Network Monitoring) for statistics and alarms on various types of data frames, enabling remote monitoring and management by network management systems
- Support QoS (Quality of Service) to prioritize voice, video, and critical data for more efficient network traffic management and congestion control
- Support ACL (Access Control List) for filtering TCP/UDP/ICMP/IGMP packets based on source/destination IP and MAC addresses
- Support 802.1X port authentication for user authentication at network access, offering local and RADIUS login authentication
- Support loopback detection to prevent network loops that can lead to network storms

Specification

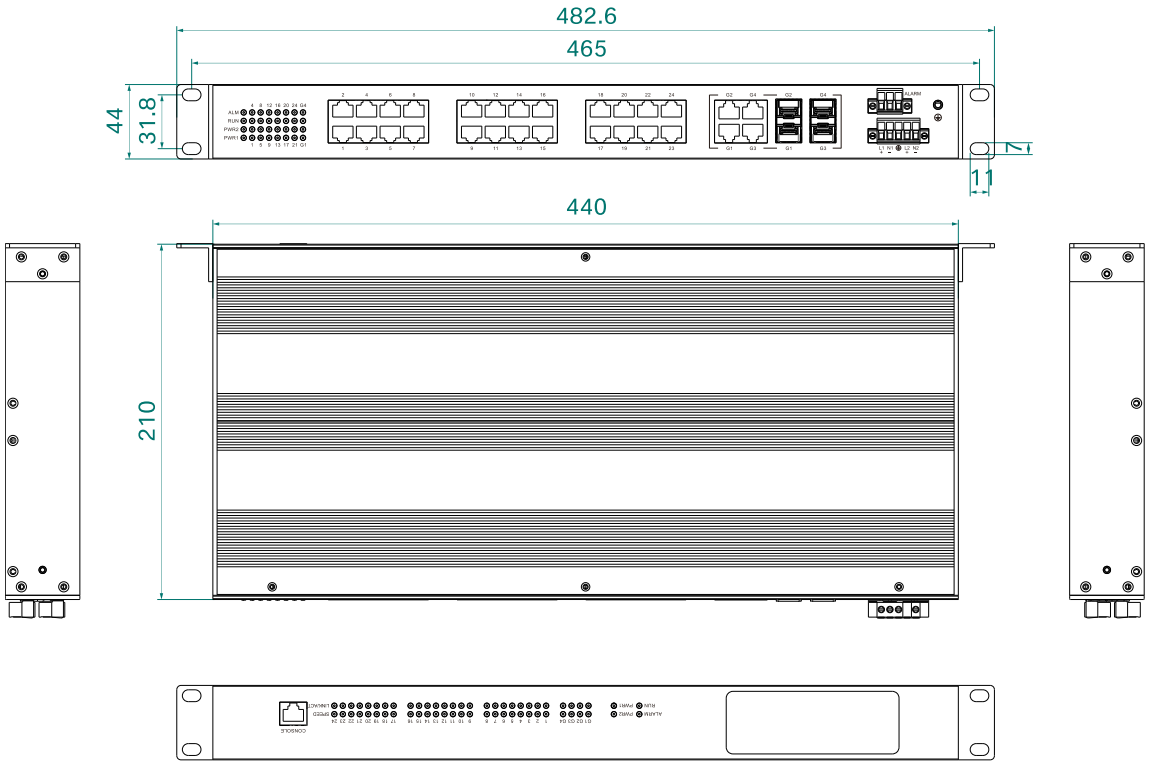
Software	
Switching	Support port configuration, port rate limiting, storm suppression, storm detection, port aggregation, LACP (Link Aggregation Control Protocol), and port statistics Support 802.1Q VLAN and port isolation Support MAC address aging and static unicast MAC address binding
Redundancy	Support private ring network technology MW-Ringv1/v2 Support ERPS (Ethernet Ring Protection Switching) Support RSTP (Rapid Spanning Tree Protocol) and compatible with STP (Spanning Tree Protocol)
Multicast	Support IGMP snooping Support static multicast MAC address binding
Security Management	Support WEB, TELNET, and SSH access control Support ACL (Access Control List), 802.1X port authentication Support loopback detection, alarms, and email logs
Management and Maintenance	Support QoS (Quality of Service), SNMP v1/v2c/v3, SNMPv1/v2c/v3 Trap, RMON (Remote Monitoring), LLDP (Link Layer Discovery Protocol) Support port mirroring, Ping, optical module DDM (Digital Diagnostics Monitoring) Support user permission management, system logs, SNTP (Simple Network Time Protocol) client, daylight saving time Support online reboot, factory reset, system upgrade, and configuration file upload/download Support centralized management through unified master computer
Switch Capability	
Processing Type	Store-and-Forward
Backplane Bandwidth	12.8Gbps
Buffer Size	4.1Mbit
MAC Table Size	8K
Interface	
Gigabit Combo Port	4*Gigabit combo ports, support 10/100/1000Base-T(X) auto-sensing RJ45 port or 1000Base-X Gigabit SFP slot optional. 10/100/1000Base-T(X) ports support full/half-duplex and auto MDI/MDI-X
100M Copper Port	24*10/100Base-T(X) auto-sensing RJ45 ports, support full/half-duplex and auto MDI/MDI-X
Relay	1 relay alarm output with 3-pin and a 5.08mm pitch locking terminal connector
CONSOLE	1 console port with RS232 signal on a RJ45 connector, used for device debugging

Specification

Status LED	Power indicator, operation indicator, alarm indicator, interface speed, and link/activity indicator
Power Supply	
Input Voltage	Single or dual AC85~264V or DC110~370V power supply optional
Power Consumption	< 15W@220VAC(full load)
Connection	5-pin with a 5.08mm pitch locking terminal connector
Physical Characteristics	
Dimensions	482.6×44×210 mm (mounting clips included)
Installations	19inch 1U Rack mount
IP Code	IP40
Weight	3kg
Working Environment	
Operating Temp	-40℃~+75℃
Storage Temp	-40℃~+85℃
Relative Humidity	5%~95% (non-condensing)
Industry Standard	
EMC	IEC 61000-4-2 (ESD): Level 4 IEC 61000-4-3 (Radiated RF Immunity): Level 3 - 10V/m IEC 61000-4-6 (Conducted RF Immunity): Level 3 - 10V IEC 61000-4-8 (Power Frequency Magnetic Field): Level 4 - 100A/m IEC 61000-4-11 (Voltage Dips & Short Interruptions): Class 3 IEC 61000-4-5 (Surge): Level 3 (※ Ethernet ports support 6kV lightning protection IEC 61000-4-4 (EFT): Level 4
Certification	CE, FCC, RoHS, IEC 61850-3

Dimensions

Unit: mm



Ordering Information

Standard Model	1G Combo Port	10/100M Copper Port	Input Voltage
MISCOM7028-4GC-AD220	4	24	Single AC85~264V/DC110~370V power supply (dual power supply optional)

Contact Us

WUHAN MAISVCH TECHNOLOGY CO.,LTD

Address: No. 079, Room 501, Chuangxinghui Free Trade Finance Building, No.777 Optical Valley 3rd Road, East Lake High-tech Development Zone, Wuhan, Hubei, China.
Mail: sales@maisvch.com
Official site: www.maisvch.com

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