MISCOM7028GX-4XGF-8GC-16GT

28-Port Layer 2 10 Gigabit Managed Rack Mount Industrial Ethernet Switch

- 4×10 Gigabit SFP+ ports, 8×Gigabit combo ports, 16 ×10/100/1000Base-T(X) ports (RJ45 connector)
- Support network redundancy protocols like MW-Ring, EAPS, ERPS, STP/RSTP/MSTP, enhancing network reliability
- Support single or dual AC85~264V/DC110~370V power supply optional
- With IP40 high-strength aluminum alloy casing and fanless design, the device can reliably operate in the temperature ranging from -40°C to +70°C

Product Description

MISCOM7028GX-4XGF-8GC-16GT series is layer 2 10 Gigabit rack mount industrial Ethernet switch. It supports 4×10 Gigabit SFP+ ports, 8×Gigabit combo ports and 16 ×10/100/1000Base-T(X) ports, utilizing a store-and-forward mechanism, which provides robust bandwidth processing capabilities, automatically detects packet errors, reduces transmission failures, and easily supports 10G networking, ensuring stable, reliable, and efficient data transmission. The product is carefully crafted with industrial-grade components, complemented by a high-standard system design and production control. It is designed for standard 19-inch 1U rack installation, featuring a high-strength aluminum alloy casing that is rugged and durable. It also employs efficient fanless cooling, enabling it to operate in a wide temperature range from -40℃ to +70℃. With a high-standard industrial protection design, it can adapt to various harsh working environments, ensuring stable communication performance.

MISCOM7028G-4XGF-8GC-16GT series switch complies with major communication standards in the industrial field, addressing issues related to communication real-time performance and network security. The product offers various management methods, including accessing the switch command line (CLI) through the CONSOLE port or TELNET/SSH protocol, accessing the switch's web interface via HTTP/HTTPS, and accessing device MIB via SNMP protocol. Additionally, it supports multiple network protocols and industry standards such as MW-Ring, EAPS, ERPS, STP/RSTP/MSTP, VLAN, GVRP, QoS, LACP, IGMP, IGMP snooping, GMRP, LLDP, 802.1X, ACL, DHCP, SNTP, port mirroring, Ping, Tracert, and more. It also supports features like configuration file upload/download and online firmware upgrades for system management. In terms of installation, it offers flexibility for both rack-mounted and desktop configurations. This product finds wide applications in various fields, including comprehensive energy, smart cities, rail transportation, intelligent traffic, smart factories, industrial automation, and more.

Features and Benefits

- Support broadcast, multicast, and unknown unicast storm suppression, as well as broadcast and multicast packet storm detection to prevent broadcast storms
- Support static link aggregation and dynamic aggregation with LACP, increasing transmission bandwidth and improving link reliability
- Support 802.1Q VLAN, providing Access, Trunk, and Hybrid interfaces for easy division of multiple broadcast domains, enhancing network security
- Support VLAN division based on ports, MAC addresses, protocols, IP subnets, etc., making it suitable for different network environments
- Support GVRP protocol for dynamic distribution, registration, and propagation of VLAN attributes, maintaining dynamic VLANs
- Support MAC address table with aging time limit, static unicast/multicast MAC address binding to interfaces, ensuring legitimate user access
- Support multicast protocols like IGMP snooping and GMRP, reducing multicast data broadcast in the network, saving network resources
- Support LLDP (Link Layer Discovery Protocol) for discovering neighbor device information, monitoring link status, facilitating topology management, and fault localization
- Support ERPS (Ethernet Ring Protection Switching) for Ethernet ring network protection, offering multiple ring networking, link backup, and fast convergence to enhance network stability
- Support EAPS (Ethernet Automatic Protection Switching) and MW-RingV2 proprietary ring network protocols, enhancing system communication reliability
- Support STP (Spanning Tree Protocol), RSTP (Rapid Spanning Tree Protocol), and MSTP (Multiple Spanning Tree Protocol) for loop elimination and improved network reliability
- Support loopback detection to prevent network loops that can lead to network storms
- Support network access via HTTP, HTTPS, TELNET, and SSH, with SSH providing secure remote login capabilities
- Support SNMPv1/v2c/v3 for information querying, modification, and troubleshooting through MIB-based network management systems, enabling centralized management
- Support QoS (Quality of Service) for prioritizing voice, video, and important data transmission in network devices to address network congestion
- Support ACL (Access Control List) for filtering packets based on source/destination IP and MAC addresses, as well as TCP/UDP/ICMP/IGMP protocols
- Support 802.1X port authentication for user identity verification and access control
- Support dual power supply redundancy with power failure relay alarms and port link-down alarms for upper-level monitoring

Specification

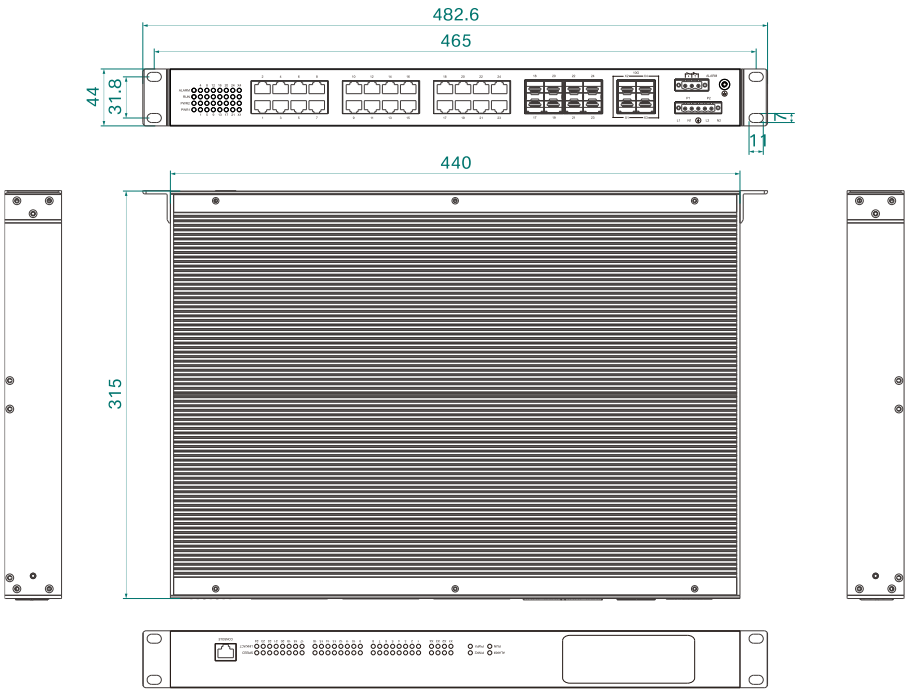
Software	
Switching	Support port configuration, port speed limiting, storm suppression, storm detection, static port aggregation, and LACP Support 802.1Q VLAN, VLAN division based on port/MAC/subnet/protocol, GVRP, and port isolation Support MAC address aging, static MAC address forwarding and filtering, MAC address binding, and learning restrictions
Redundancy	Support MW-RingV2 private ring network technology Support EAPS and ERPS Support STP/RSTP/MSTP
Multicast	Supports IGMP snooping Supports static multicast GMRP
Security Management	Support HTTP, HTTPS, TELNET, SSH access methods Support ACL for data filtering at L2-L4 layers Support 802.1X port authentication and MAC address authentication Support loopback detection and relay alarm
Management and Maintenance	Support QoS, SNMP v1/v2c/v3, SNMP v1/v2c Traps, LLDP Support port mirroring, Ping, Tracert Support user privilege management, system logs, local time setting synchronization, and SNTP network time synchronization Support online reboot, factory reset, system upgrade, configuration file upload/download Support unified upper-level software management
Switch Capability	
Processing Type	Store-and-Forward
Backplane Bandwidth	128Gbps
Buffer Size	12Mbit
MAC Table Size	8K
Interface	
10G Fiber Port	4*10GBase-R SFP+ ports, compatible with 1000Base-X
1G Combo	8*Gigabit combo ports, support 10/100/1000Base-T(X) auto-sensing RJ45 ports or 1000Base-X SFP slots optional. 10/100/1000Base-T(X) ports support full/half duplex and auto MDI/MDI-X
1G Copper Port	16*10/100/1000Base-T(X) auto-sensing RJ45 ports, support full/half duplex and auto MDI/MDI-X
Relay	1 relay alarm output with 3-pin connectors spaced at 5.08mm and equipped with locking mechanisms

Specification

CONSOLE	1 CONSOLE port with a RJ45 connector, supporting RS232 signal for device debugging and command configuration
Status LED	Power indicator, Operation indicator, Alarm indicator, Interface speed, and Link/Activity status indicator
Power Supply	
Input Voltage	Single or dual AC85~264V/DC110~370V power supply optional
Power Consumption	＜30W@AC220V(full load)
Connection	5-pin terminal block with a 5.08mm pitch and locking mechanism
Physical Characteristics	
Dimensions	482.6×44×315(mm) (mounting brackets included)
Installations	19inch 1U Rack mount
IP Code	IP40
Weight	4kg
Working Environment	
Operating Temp	-40℃~+70℃
Storage Temp	-40℃~+85℃
Relative Humidity	5%~95% (non-condensing)
Industry Standard	
EMC	IEC 61000-4-2 (ESD): Level 4 IEC 61000-4-5 (Surge): Level 4 ※ Ethernet ports support 6kV surge protection IEC 61000-4-4 (EFT): Level 4
Certification	CE, FCC, RoHS

Dimensions

Unit: mm



Ordering Information

Standard Model	10G Fiber Port	1G Combo Port	1G Copper Port	Input Voltage
MISCOM7028GX-4XGF-8GC-16GT-AD220	4	8	16	Single AC85~264V/DC110~370V power supply
MISCOM7028GX-4XGF-8GC-16GT-2AD220	4	8	16	Dual AC85~264V/DC110~370V power supply

Contact Us

Wuhan Maiwe Communication Co., Ltd

Address: No.52 Liufang Avenue, East lake High-tech Development Zone, Wuhan, China.

Tel: 027 8717 0217

Mail: enquiry@maiwe.com

Official site: www.maiwe.com