MISCOM8052GX-4XGF-48GT

52-Port Layer 3 10G Managed Rack-Mount Industrial Switch

- Support 4*10 Gigabit SFP+ ports and 48*Gigabit copper ports
- Support fast ring network (MW-Ring), ERPSv1/v2, STP/RSTP/MSTP, and other ring network redundancy protocols to enhance network reliability
- Support IPv4/IPv6 static routing, RIPv1/v2, OSPF dynamic routing protocols for routing and forwarding
- Support single or dual power supply input models with a wide voltage range: AC85~264V for AC input and DC110~370V for DC input. Dual power supplies offer power redundancy.
- High-strength aluminum alloy casing with fanless heat dissipation, the operating temperature from -40°C to +75°C

Product Description

The MISCOM8052GX-4XGF-48GT is a layer 3 10 Gigabit industrial Ethernet switch. It supports 4*10 Gigabit SFP+ ports and 48 Gigabit copper ports, utilizing a store-and-forward mechanism. It has powerful bandwidth processing capabilities, can automatically detect packet errors, reducing transmission failures, easily supporting Gigabit networks,

and ensuring stable, reliable, and efficient data transmission.

The product is built with industrial-grade components and features a high-strength aluminum alloy casing in a 19-inch 1U rack-mount design. It is rugged and durable, with fanless efficient heat dissipation, capable of operating in a wide temperature range from -40°C to +75°C. It adheres to high industrial protection standards and can withstand various harsh working environments while maintaining stable communication performance.

The MISCOM8052GX-4XGF-48GT layer 3 switch complies with key communication standards in the industrial field, addressing issues such as communication real-time performance and network security. It offers multiple management options, including access to the switch's command-line interface (CLI) through the CONSOLE port or TELNET/SSH protocols, access to the web interface through HTTP/HTTPS, and device MIB access through SNMP protocol. It also supports various network protocols and industry standards, such as RIP, OSPF, VRRP, ERPS, MW-Ring, STP/RSTP/MSTP, VLAN, QoS, LACP, PIM, IGMP, IGMP Snooping, LLDP, 802.1X, ACL, RMON, DHCPv4 client/server/relay/listening, NTP, port mirroring, DDM, Ping, Traceroute, etc. It supports configuration file uploads and downloads, online upgrade, and backup of image files, among other system management features. It can be installed in either a rack-mount or desktop configuration, making it suitable for a wide range of applications, including comprehensive energy, smart cities, rail transportation, intelligent traffic, smart factories, and industrial automation.

Features and Benefits

- Support static link aggregation and dynamic aggregation (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 division of multiple broadcast domains, enhancing network security
- Support VLAN segmentation based on MAC, protocol, IP subnet, etc., suitable for networks in different environments
- Support PIM, IGMP, IGMP Snooping, and multicast filtering to reduce multicast data broadcast in the network, saving network resources
- Support LLDP (Link Layer Discovery Protocol) to obtain LLDP neighbor device information, monitor link status, and facilitate topology management and fault localization
- Support ERPS (Ethernet Ring Protection Switching) v1/v2 for Ethernet ring protection technology, providing ring network configuration, link backup, rapid convergence, and improved network stability
- Support VRRP (Virtual Router Redundancy Protocol) to create a virtual router with multiple router

devices for redundancy and backup

- Support SNMPv1/v2c/v3, allowing information queries, modifications, and troubleshooting through the MIB (Management Information Base) network management system, enabling centralized management
- Support RMON (Remote Monitoring) for remote network monitoring, statistics, and alarms on various types of data frames, useful for remote monitoring and management in network management systems
- Support port security by converting dynamic MAC addresses into secure dynamic/static/sticky MAC addresses, enhancing device security
- Support 802.1X port authentication for user authentication and access control of connecting users
- Support AAA (Authentication, Authorization, and Accounting) security network management mechanism through RADIUS and TACACS+ for preventing unauthorized user logins
- Support ACL (Access Control List) for customizing various frame type filtering rules, allowing filtering or rate limiting of specified packets
- Support QoS (Quality of Service) to prioritize voice, video, and important data transmission in network devices, addressing network congestion
- Support DHCPv4 server for centralized dynamic management and configuration of user IP addresses
- Support DDM (Digital Diagnostic Monitoring) for monitoring parameters such as temperature, voltage, current, transmit and receive optical power of DDM SFP optical modules

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, VLANs based on MAC/protocol/IP subnet, PVLAN (Private VLAN), and VLAN translation Support MAC address aging and learning restrictions, as well as static MAC address binding
Redundancy	Support Fast Ring Network (MW-Ring) private protocol Support ERPSv1/v2 (Ethernet Ring Protection Switching) Support STP (Spanning Tree Protocol)/RSTP (Rapid Spanning Tree Protocol)/MSTP (Multiple Spanning Tree Protocol)
Multicast	Support IGMP Snooping Support multicast filtering Support IGMPv2/v3 (Internet Group Management Protocol versions 2 and 3) Support PIM-SM (Protocol Independent Multicast - Sparse Mode)

Specification

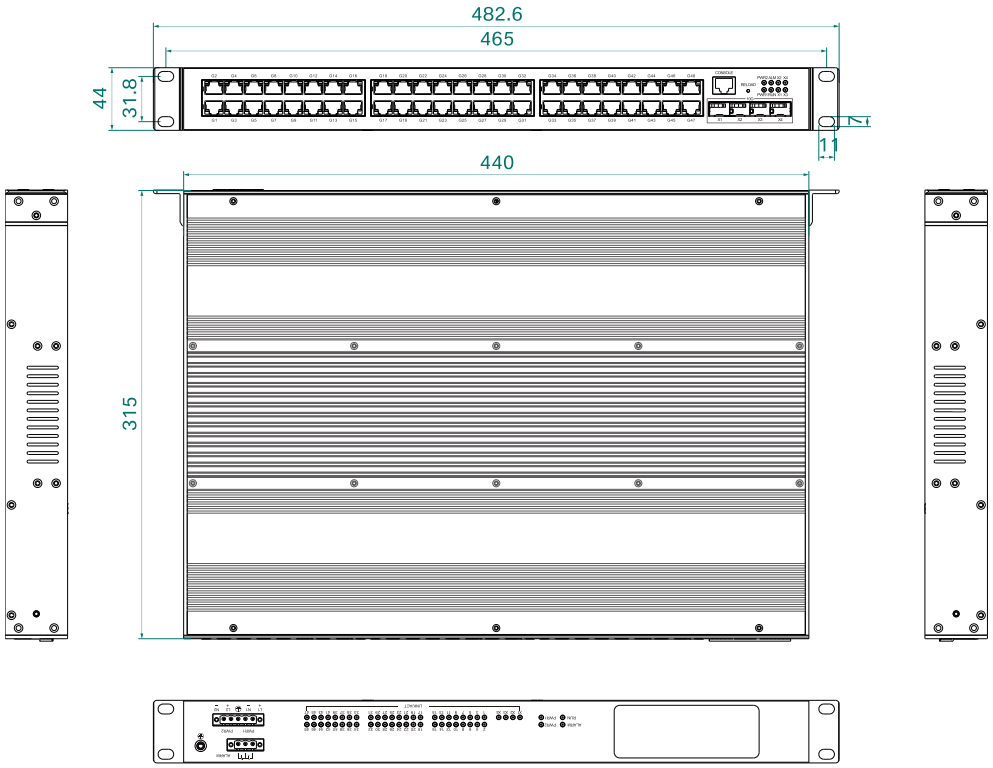
Routing	Support IPv4/IPv6 static routing Support routing control, routing encryption, and routing access control lists (ACLs) Support dynamic routing protocols such as RIPv1/v2 (Routing Information Protocol version 1/2) and OSPF (Open Shortest Path First) Support VRRPv2/v3 (Virtual Router Redundancy Protocol version 2/3)
Security Management	Support HTTP/HTTPS, SNMP, TELNET/SSH for access management Support ACL (Access Control List), 802.1X port authentication, AAA (Authentication, Authorization, and Accounting) authentication, and port security Support source IPv4/IPv6 protection and ARP protection Support loopback detection and relay alarms
Management and Maintenance	Support QoS (Quality of Service), SNMPv1/v2c/v3, SNMPv1/v2c/v3 Trap, RMON (Remote Monitoring), and LLDP (Link Layer Discovery Protocol) Support DHCPv6 client, DHCPv4 client/server/listening/relay Support port mirroring, DDM (Digital Diagnostic Monitoring), Ping IPv4/IPv6, Traceroute IPv4/IPv6 Support user permission management, logging, NTP client Support configuration file management, image upgrades with dual backup, online reboot, and factory reset
Switch Capability	
Processing Type	Store and Forward
Backplane Bandwidth	180Gbps
Buffer Size	32Mbit
MAC Table Size	32K
Interface	
10G Fiber Port	4*10GBase-R 10G SFP+ modules
1G Copper Port	48*10/100/1000Base-T(X) auto-sensing Gigabit RJ45 port, supporting full/half duplex and auto MDI/MDI-X
Relay	1 Relay Alarm Output, with 3-pin 5.08mm pitch locking terminal connectors
CONSOLE	1 Console Port, RJ45 with RS232 Signal, used for device debugging and command-line configuration
Button	One-Button Reboot or Factory Reset
Status LED	Power Indicator, Operation Indicator, Alarm Indicator, Interface Indicator
Power Supply	

Specification

Input Voltage	AC85~264V/DC110~370V
Power Consumption	＜63W@AC220V(full load)
Connection	5.08mm pitch 5-pin terminal block
Physical Characteristics	
Dimensions	482.6*44*315 mm (mounting brackets included)
Installations	19inch 1U Rack mount
Weight	5.6kg
Working Environment	
Operating Temp	-40℃~+75℃
Storage Temp	-40℃~+85℃
Relative Humidity	5%~95% (non-condensing)
Industry Standard	
EMC	IEC 61000-4-2 (ESD - Electrostatic Discharge): Level 4: Contact discharge ±8kV, Air discharge ±15kV IEC 61000-4-5 (Surge): Level 4: Power ports: Common mode ±4kV, Differential mode ±2kV IEC 61000-4-4 (EFT - Electrical Fast Transient): Level 4: Power supply: ±4kV; Network ports: ±2kV
Certification	CE, FCC, RoHS

Dimensions

Unit: mm


482.6
465
44
31.8
7
11
440
315

Ordering Information

Standard Model	10G Fiber Port	1G Copper Port	Input Voltage
MISCOM8052GX-4XGF-48GT-2AD220	4	48	Dual AC85~264V or DC110~370V

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