MISCOM8030PTP-6XGF-16GF-8GC

30-Port 10G Layer-3 Rack Mounting PTP Industrial Ethernet Switch



- Support 6*10G SFP+ ports, 16*Gigabit SFP ports and 8*Gigabit Combo ports
- Support IEEE1588 (PTP), IEEE802.1AS (gPTP), provide high-precision clock synchronization
- Support fast ring networking (MW-Ringv2), ERPSv1/v2, STP/RTSP/MSTP to improve network reliability
- Support IPv4/IPv6 static routing, RIP, RIPng, OSPFv2/v3 dynamic routing protocol, realize routing and forwarding
- Support single or dual DC24, DC48 or AD220 power input optional, dual power input supports power redundancy
- High strength aluminum alloy shell, IP40 protection, fanless design for heat dissipation, can reliably work in harsh industrial environments of -40 ℃~+75 ℃
- Complies with IEC 61850-3

Product Description

MISCOM8030PTP-6XGF-16GF-8GC layer-3 10G PTP industrial Ethernet switch, provides high-precision clock synchronization, supports 6*10G SFP+ ports, 16*Gigabit SFP ports and 8*Gigabit Combo ports. It adopts the storage and forwarding mechanism and has strong bandwidth processing capabilities, automatically troubleshooting data packet errors, reducing transmission failures, and easily supporting 10G networking to ensure stable, reliable, and efficient data transmission. This product uses industrial grade components, combined with high standard system design and production control, with standard 19 inch 1U rack mounting. It has high strength durable aluminum alloy shell, fanless efficient heat dissipation, -40℃ ~ +75℃ wide working temperature, high standard industrial protection design, can adapt to a variety of harsh working environment, stable communication performance.

The MISCOM8030PTP-6XGF-16GF-8GC switch follows the main communication standards in the industrial field, and meets the technical requirements such as real-time communication, network security and so on. This product provides various ways for managing function, such as accessing the switch command line (CLI) through the CONSOLE port or TELNET/SSH protocol, the switch WEB interface through HTTP / HTTPS, and the device MIB through the SNMP protocol. Multiple network protocols and industry standards, such as PTP, RIP, OSPF, VRRP, ERPS, STP/RSTP/MSTP, VLAN, QoS, LACP, PIM, IGMP, IGMP Snooping, MLD Snooping, LLDP, 802.1X, ACL, RMON, DHCPv4 Client/Server/Snooping/Relay, NTP Client, port mirroring, DDM, Ping, Traceroute etc. In terms of installation, user can flexibly choose either the rack mounting type or the desktop type. This product can be widely used in comprehensive energy, smart city, rail transit, intelligent transportation, industrial automation and other fields.

Features and Benefits

- Support unicast frame, broadcast frame and unknown storm control, support broadcast and multicast packet storm detection to prevent network storm
- Support link static aggregation and dynamic aggregation LACP, which can increase transmission bandwidth, improve link reliability and realize network load sharing
- Support 802.1Q VLAN, provide Access, Trunk, Hybrid interface easy to divide multiple broadcast domain, enhance the security of the network
- Support MAC, protocol, and IP sub-network based VLAN
- Support MAC address table and aging time limit, static unitcast/multicast MAC address and interface binding to ensure the use of legal users
- Supports PIM, IGMP, IGMP Snooping, MLD Snooping and multicast filtering to reduce multicast data broadcast on the network and save network resources
- Support LLDP link layer discovery protocol, obtain LLDP neighbor device information, conduct link status monitoring, facilitate topology management and fault location
- Support ERPS Ethernet multi-ring protection technology, provide multi-ring networking, link backup, achieve fast convergence, improve network stability
- Support VRRP (Virtual Router Redundancy Protocol), to make multiple routing devices up to a virtual router to achieve redundant backup
- Support HTTP, HTTPS, TELENT, SSH, CONSOLE port and other login methods
- Support SNMPv1/v2c/v3, through the MIB network management system can be information query, information modification and troubleshooting, to achieve centralized management
- Support RMON remote network monitoring, make statistics and alarm of various types of data frames, and can be used for remote monitoring and management of network management system
- Support port security, convert dynamic MAC addresses to secure dynamic/static/ Sticky MAC, prevent illegal user access, and enhance device security
- Supports 802.1X port authentication, authentication and access control for access users
- Support AAA safe network management, and conduct authentication, authorization and billing of users through RADIUS and TACACS +, to prevent illegal users from logging in
- Support ACL access control list, can customize a variety of frame type filtering rules, the specified message filtering or rate limit
- Support QoS service quality, so that voice, video and important data in the network equipment priority transmission, to solve the network congestion
- Support port mirroring to collect port sent and received data for network detection and fault management
- Support DDM digital diagnosis and monitoring, and can detect the temperature, voltage, current, transmitting/receiving optical power for the DDM SFP optical module
- Support Ping IPv4/v6, Traceroute IPv4 / v6 to detect network connectivity and locate fault points
- Support the dual power supply redundant power alarm and port drop alarm, support relay alarm formula
- Support DHCPv4 server, centralized dynamic management and configuration of user IP addresses
- Support DHCPv4 snooping, ensure that DHCP clients obtain IP addresses from a legitimate DHCP server to prevent DHCP attacks

- Support DHCPv4 relay to assist DHCP server to dynamically assign network parameters to DHCP clients
- Support system logging for user operation, system security, system failure and other information, and support remote monitoring of Syslog server

Technical Specifications

Software	
Switching	Support ports configuration, port speed limit, storm control, storm detection, port aggregation, LACP, port count Support 802.1Q VLAN, VLAN based on MAC/protocol/IP subnetwork/stream, port isolation, VLAN mapping Support MAC address aging and learning restrictions, static unicast or multicast MAC address binding
PTP	IEEE 1588v2 (Precision Time Protocol, PTP) IEEE 802.1AS (generalized PTP, gPTP)
Redundancy	Support fast ring networking (MW-Ringv2) private agreement Support ERPS Support STP/RSTP/MSTP
Broadcast	Support IGMP snooping Support MLD Snooping Support multicast filtering Support IGMPv2/v3 Support PIM-SM
Routing	Support IPv4/IPv6 static routing Support routing control, routing encryption and routing access control list Support RIP, RIPng, OSPFv2/v3 dynamic routing Support VRRPv2/v3
Security Management	Support HTTP/HTTPS, SNMP, TELNET/SSH access management Support 802.1 port authentication, AAA authentication, RADIUS, TACACS + protocol Support port secure, source IPv4/IPv6 protection, ARP protection Support ACL, filter the L2-L4 layer data Support loopback detection, relay alarm

Technical Specifications

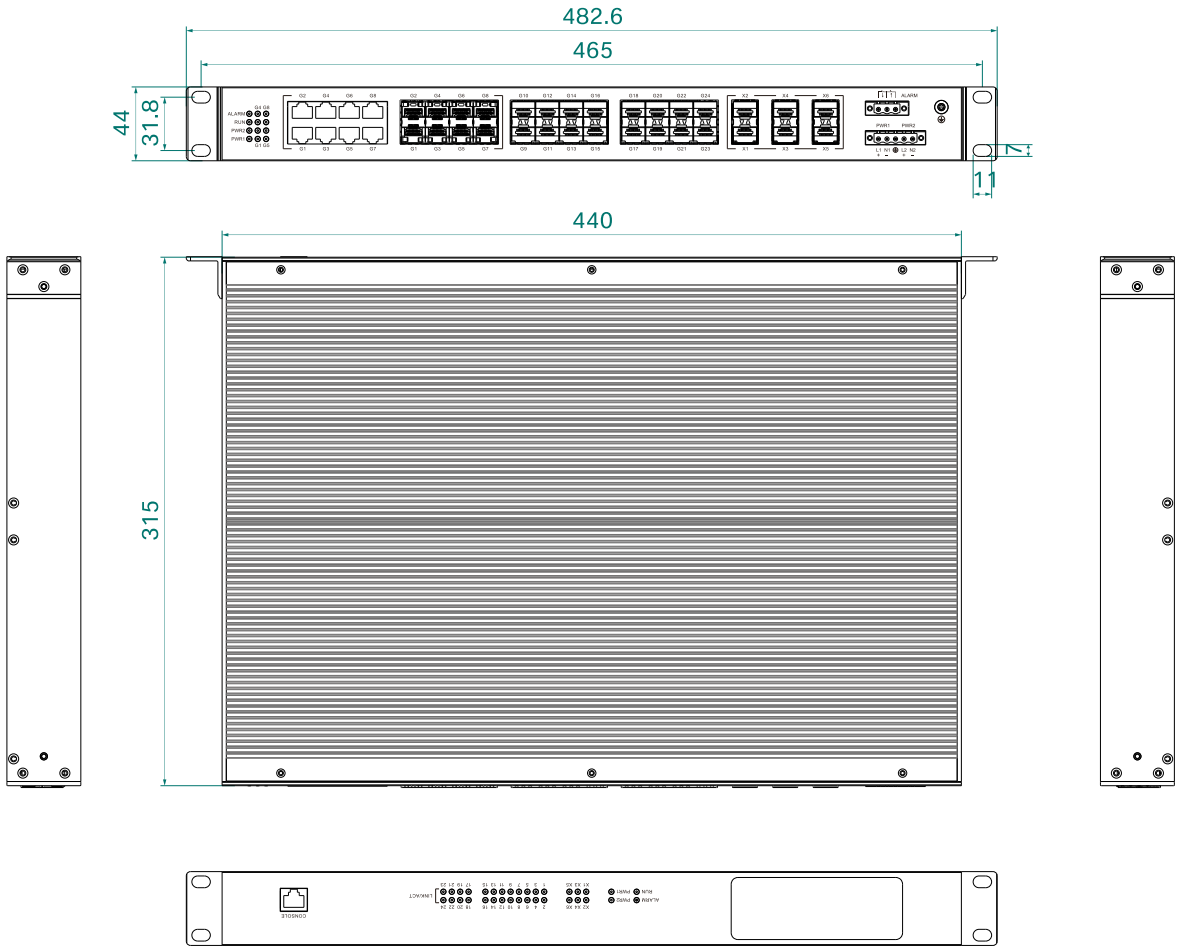
Management and Maintenance	Support QoS, SP, DWRR queue scheduling Support DHCPv6 Client/Snooping/Relay, DHCPv4 Client/Server/Snooping/Relay Support SNMPv1/v2c/v3, SNMPv1/v2c/v3 Trap, RMON, LLDP, LLDP MED Support private network management agreement MW-NMPv2 Support port mirroring, DDM, Ping IPv4/IPv6, and Traceroute IPv4 /IPv6 Support user rights management, log management Support device temperature monitoring Support OAM/CFM/UDLD/sFlow/line diagnosis Support configuration file management, mirror upgrade and double backup, online restart, and restore factory settings
Switching	
Processing Type	Store-and-forward
Backplane Bandwidth	180G
Buffer Size	32Mbit
MAC Table Size	32K
Interface	
10G Fiber Port	6*10GBase-R SFP+ ports
Gigabit Fiber Port	16*1000Base-X SFP ports
Gigabit Copper Port	8*Gigabit Combo ports, support 10/100/1000Base-T (X) auto-sensing RJ45 ports, or 1000Base-X SFP optional, full / half-duplex, auto MDI/MDI-X connection
Relay	1 relay alarm output, 3-pin 5.08mm terminal block
CONSOLE	1 RJ45 CONSOLE port of RS232 signal for equipment debugging and command line configuration
Status LED	Power indicator, operation indicator, alarm indicator, port indicator
Power Supply	
Power Input	DC model: DC18~72V, anti-reverse connection, single/dual power optional AC model: AC85~264V / DC110~370V, single/dual power optional
Power Consumption	＜47W@DC24V, ＜46W@DC48V, ＜48W@AC220V

Technical Specifications

Connection	5-pin 5.08mm terminal block
Protection	Over current protection
Physical Characteristics	
Dimension	482.6×44×315 mm (Including mounting brackets)
Installation	Standard 19-inch 1U rack mounting
IP Code	IP40
Weight	About 4.5 kg
Working Environment	
Operating Temp	-40℃~+75℃
Storage Temp	-40℃~+85℃
Ambient Humidity	5%~95% (No condensation)
Industry Standard	
EMS	● IEC 61000-4-2(ESD): Level 4 ● IEC 61000-4-5(Surge): Level 4 ※Fiber port support 6kV lightning protection ● IEC 61000-4-4(EFT): Level 4
Certification	CE, FCC, RoHS, IEC 61850-3,UL

Installations

Unit: mm



Ordering Information

Standard Model	10G Fiber Port	1G Fiber Port	1G Combo Port	Input Voltage
MISCOM8030PTP-6XGF-16GF-8GC-AD220	6	16	8	AC85~264V / DC110~370V (Dual power optional)

Contact Us

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