MISCOM8220GX-4XGF-8GF-8GT

20-Port 10G DIN-Rail Layer 3 Industrial Ethernet Switch



- 4*10G SFP+ ports, 8*1G SFP ports and 8*1G RJ45 ports
- Support DDM digital diagnosis and monitoring, and can detect the temperature, voltage, transmitting optical power, receiving sensitivity of the DDM optical module, and make alarm for DDM abnormal parameters
- Support ring network redundancy protocols like MW-Ring, EAPS, ERPS, STP/RSTP/MSTP to improve the network reliability
- Support static routing, RIPv 1 / v2, OSPF dynamic routing protocol, realize routing and message forwarding
- Support single AC85~264V/DC110~370V power input, or dual DC 12~48V power input, dual input support power redundancy
- High strength aluminum alloy shell, IP40 protection, fanless heat dissipation, can reliably work in harsh industrial environments of -40 ℃~+75 ℃

Product Description

MISCOM8220GX-4XGF-8GF-8GT layer 3 10G industrial Ethernet switch supports 4*10G SFP + ports, 8*1G SFP ports, and 8*1G RJ45 ports. It adopts a 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. The product uses industrial grade components, combined with high standard system design and production control. Standard 19-inch 1U rack type installation, high strength durable aluminum alloy shell, fanless efficient heat dissipation, -40℃ ~ + 75℃ wide temperature work, high standard industrial protection design, can adapt to a variety of harsh working environment, stable communication performance.

The MISCOM8220GX-4XGF-8GF-8GT layer-3 switch meets the main communication standards in the industrial field, and meet the technical requirements such as real-time communication, network security and

so on. The product provides various ways of managing switches, 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 RIP, OSPF, VRRP, PIM, EAPS, ERPS, STP/RSTP/MSTP, VLAN, QoS, LACP, IGMP, IGMP Snooping, GMRP, LLDP, 802.1X, ACL, DHCP, SNTP, port mirroring, DDM, Ping, Tracert, etc. In terms of installation, the flexible choice of DIN-rail mount type or desktop mount type. The products are widely used in comprehensive energy, smart city, rail transit, intelligent transportation, smart factory, industrial automation and other fields.

Product Features

- Support storm suppression of broadcast, multicast and unknown unicast, support broadcast and multicast packet storm detection to prevent broadcast storm
- Support the link static aggregation and dynamic aggregation LACP, which can increase the transmission bandwidth, improve the link reliability and realize the network load sharing
- Support port mirroring, collecting port ingress/egress, and bidirectional data for network detection and fault management
- Support 802.1Q VLAN, provide Access, Trunk, Hybrid interface easy to divide multiple broadcast domain, enhance the security of the network
- Support VLAN division based on port, MAC, protocol, IP subnetwork, etc., which can be applied to different environments
- Support GVRP protocol, realize dynamic distribution, registration and propagation of VLAN attributes, and maintain dynamic VLAN
- Support MAC address table and aging time limit, static unicast / multicast MAC address bound with interface to ensure the use of legitimate users
- The PIM, IGMP, GMRP, IGMP Snooping and other multicast protocols are supported to reduce the broadcast of multicast data in 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-loop protection technology, provide multi-loop networking, link backup, achieve fast convergence, improve network stability
- Support STP, RSTP, MSTP generation tree protocol, can eliminate network loop, improve network reliability
- Support EAPS loop protection protocol and MW-RingV2 private loop network protocol, enhance the reliability of system communication
- Support loop back detection to prevent the network from ring and causing a network storm
- Support the VRRP virtual routing redundancy protocol, forming multiple routing devices into a virtual router to achieve redundant backup
- Support IPv4 static routing configuration, RIPv1/v2, OSPF dynamic routing protocol, realize routing and forwarding
- Support HTTP, HTTPS, TELNET, SSH network access mode, SSH can provide a secure remote login
- Support SNMPv1/v2c/v3, through the MIB network management system can be information query, information modification and troubleshooting, to achieve centralized management
- Support QoS service quality, give priority to voice, video and important data in network devices, and solve network congestion

- Support ACL access control list, filtering TCP / UDP / ICMP / IGMP messages based on source / destination IP and MAC address
- Support 802.1X port authentication, authentication and access control for access users
- Support dual power redundancy drop relay alarm and upper computer alarm, support port drop upper computer alarm

Technical Specifications

Software	
Switching	Support port configuration, such as port rate, duplex mode, flow control, giant frame, etc Support 802.1Q VLAN, port / MAC / subnet / protocol based VLAN division, GVRP, port isolation Support port speed limit, storm suppression, storm detection, static port convergence, dynamic convergence LACP Support MAC address aging, static MAC address binding and filtering, and MAC address learning restrictions
Redundancy	Support MW-RingV2 private ring network technology support EAPS support ERPS Support STP/RSTP/MSTP
Broadcast	Support static multicast, IGMP Snooping, and GMRP Support IGMPv1/v2/v3 Support PIM-DM, PIM-SM
Routing	Support static routing Support RIPv1/v2, OSPF dynamic routing support VRRP
Security Management	Support ring circuit detection Support HTTP, HTTPS, TELNET, and SSH access mode Support ACL, data filtering of L2-L4 layer Support 802.1X port authentication and MAC address authentication Support dual power supply redundancy drop relay alarm
Management and Maintenance	Support QoS, Cos/DSCP/Policy mapping, and WRR/SP/SRR queue scheduling algorithm Support DHCP Server / Security / Relay / Snooping Support SNMP v1 / v2c / v3, SNMPv1 / v2c Trap, LLDP Support port mirror, Ping, Tracert, DDM Support user rights management, system logs, local time setting synchronization, and SNTP network time synchronization Support online restart, factory reset, system upgrade, configuration file upload / download Support unified upper-level computer software management
Switching	

Technical Specifications

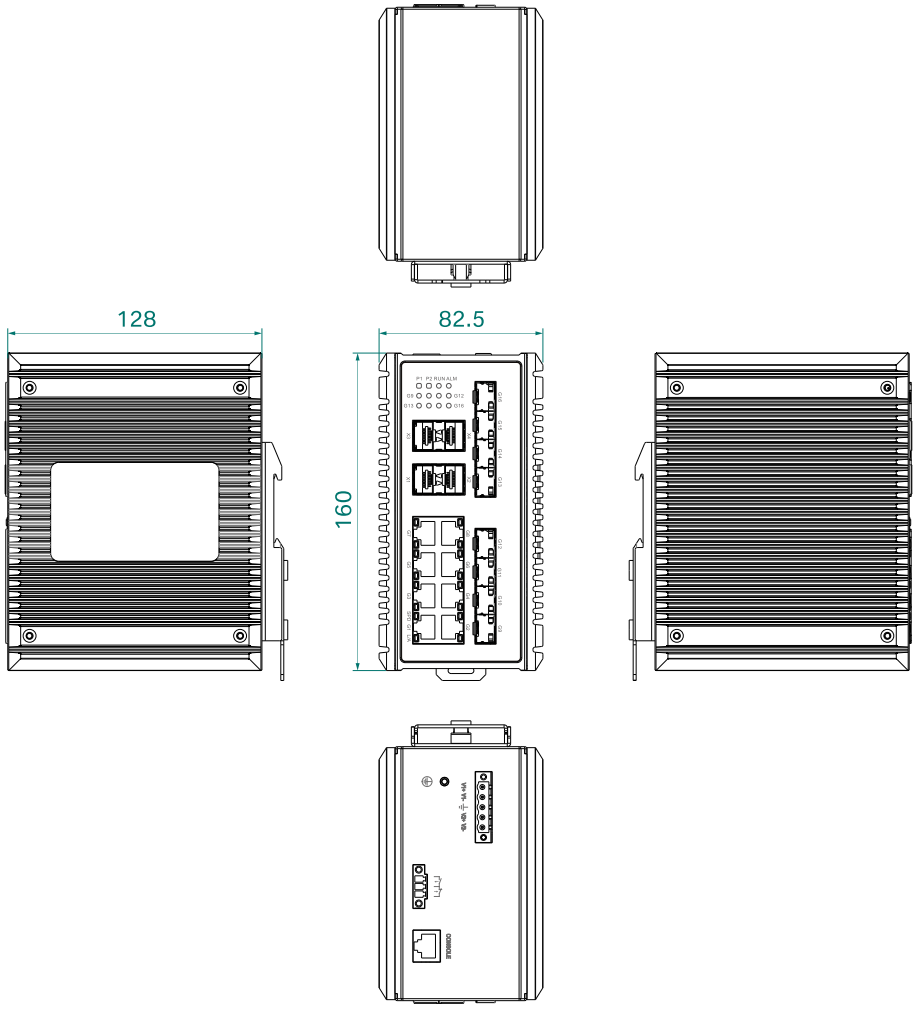
Processing Type	Store and forward	
Backplane Bandwidth	128Gbps	
Buffer Size	12Mbit	
MAC Table Size	16K	
Interface		
10G Fiber Port	4*10GBase-R SFP+ ports	
1G Fiber Port	8*1000Base-X SFP ports	
1G Copper Port	8*10/100/1000Base-T (X) auto-sensing RJ45 port, full / half-duplex, auto MDI/MDI-X connection	
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, SFP interface indicator, port rate and connection/active status indicator	
Power	MISCOM8220GX-4XGF-8GF-8GT	MISCOM8220GX-4XGF-8GF-8GT-AD220
Power Input	DC12~48V Dual power redundancy	AC85~264V / DC110~370V
Power Consumption	＜22W@DC12V(full load)	＜22W@AC220V(full load)
Connection	5-pin 5.08mm terminal block	5-pin 5.08mm terminal block,3-pin for power
Protection	Anti-connection protection	Built-in 3A over current protection
Physical Characteristics		
Dimension	160×82.5×128 mm (Not including DIN rail mounting clip)	
Installation	35mm standard DIN-rail type installation	
IP Code	IP40	
Weight	About 1.5kg	
Working Environment		

Technical Specifications

Operating Temp	-40℃~+75℃
Storage Temp	-40℃~+85℃
Ambient Humidity	5%~95% (No condensation)
Industry Standard	
EMC	IEC 61000-4-2(ESD): Level 4(Contact discharge±8kV, air discharge±15kV) IEC 61000-4-5(Surge): Level 3 (Power: common mode±2kV, differential mode±2kV network port: common mode±6kV,differential mode±2kV） IEC 61000-4-4(EFT): Level 4(Power: ±4kV, Copper port: ±2kV)

Installations

Unit: mm



Ordering Information

Standard Model	10G Fiber Port	1G Fiber Port	1G Copper Port	Input Voltage
MISCOM8220GX-4XGF-8GF-8GT	4	8	8	Dual DC12~48V
MISCOM8220GX-4XGF-8GF-8GT-AD220	4	8	8	AC85~264V / DC110~370V

Contact Us

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