

CISCOM8028GX-4XGF-24GT

28-port Layer 3 10G Rack-mount Industrial Ethernet Switch



- Supports 4 10G SFP+ slots and 24 Gigabit RJ45 ports, providing users with flexible networking options
- Support fast ring network (CS-RingV2), EAPS , ERPS, STP/RSTP/ MSTP and other ring network redundancy protocols to improve network reliability
- Support static routing, RIP, OSPF dynamic routing protocols to achieve routing selection and message forwarding
- Support DDM digital diagnostic monitoring, which can monitor the operating temperature, voltage, current, transmit/receive optical power and other parameters of DDM SFP optical modules
- Support device temperature monitoring
- Supports single or dual DC24 , DC48 or AD220 power input options, dual input supports power redundancy
- High-strength aluminum alloy housing, IP40 protection grade, fanless housing heat dissipation, the equipment can work reliably in -40 °C ~ + 75 °C harsh industrial environment

Product Introduction

CISCOM8028GX-4XGF-24GT series layer 3 core 10G rack-mounted industrial Ethernet switch, supporting 4 10G SFP+ slots and 24 Gigabit RJ45 ports, adopting a store-and-forward mechanism, with powerful bandwidth processing capabilities, automatic troubleshooting of packet errors, reducing transmission failures, and easily supporting 10G networking to ensure stable, reliable and efficient data transmission. The product is made of selected industrial-grade components, with high-standard system design and production control, standard 19-inch 1U rack-mounted installation, high-strength aluminum alloy shell, sturdy and durable, fanless and efficient heat dissipation, -40°C~ + 75°C wide temperature operation, high-standard industrial protection design, can adapt to various harsh working environments, and stable communication performance.

CISCOM8028GX-4XGF-24GT series layer 3 switches comply with the main communication standards in the industrial field and meet technical issues such as real-time communication and network security. The product provides a variety of ways to manage the switch, such as through USB Access the switch command line (CLI) through the CONSOLE port or TELNET/SSH protocol, access the switch WEB interface through HTTP/HTTPS, and access the device MIB through the SNMP protocol. It also provides a variety of network protocols and industry standards, such as RIP, OSPF, VRRP, CS-Ring, EAPS, ERPS, STP/RSTP/MSTP, VLAN, GVRP, QoS, LACP, PIM, IGMP, IGMP Snooping, GMRP, LLDP, 802.1X, ACL, DHCP Server/Snooping/Relay/Security, SNTP client, port mirroring, DDM, Ping, Traceroute, etc. can improve the performance, reliability and security of the network and meet the needs of various complex networks. The products have passed strict functional, high and low temperature, safety and EMC tests to meet the application requirements of complex networks and harsh industrial environments, and can be widely used in integrated energy, smart cities, rail transit, intelligent transportation, smart factories, industrial automation and other fields.

Features

- Support storm suppression of broadcast, multicast and unknown unicast messages, storm detection of broadcast and multicast packets, and prevents network storms
- Support static link aggregation and dynamic link aggregation LACP, which can increase transmission bandwidth, improve link reliability and realize network load sharing
- Support 802.1Q VLAN, provide Access, Trunk, Hybrid interface to easily divide multiple broadcast domains and enhance network security
- Support VLAN division based on port, MAC, protocol, IP subnet, etc., which can be applied to networks in different environments
- Support MAC address table and aging time limit, static MAC address binding and filtering to ensure the use of legitimate users
- Support GVRP protocol to dynamically distribute, register and propagate VLAN attributes and maintain dynamic VLAN
- Support multicast protocols such as PIM, IGMP, GMRP, IGMP Snooping, etc., 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, monitor link status, and facilitate topology management and fault location
- Support STP, RSTP, and MSTP spanning tree protocols to eliminate network loops and improve network reliability
- Supports ERPS Ethernet multi-ring protection technology, provides multi-ring networking, performs link backup, achieves rapid convergence, and improves network stability
- Supports EAPS loop protection protocol and CS-RingV2 private ring network protocol, enhancing the reliability of system communication
- Support loopback detection to prevent network loops from causing network storms
- Support VRRP virtual routing redundancy protocol, which combines multiple routing devices into a virtual router to achieve redundant backup
- Support static routing configuration, RIPv1/v2, OSPF dynamic routing protocols to achieve routing selection and message forwarding
- Support SNMPv1/v2c /v3, and can query, modify and troubleshoot information through MIB network management system to achieve centralized management
- Support QoS service quality, so that voice, video and important data are transmitted first in network devices to solve network congestion
- Support ACL access control list, filter TCP/UDP/ICMP/IGMP messages based on source/destination IP and MAC address
- Support 802.1X port authentication to authenticate users and control access rights
- Support DHCP server to centrally manage and configure user IP addresses dynamically

Technical Specifications

Software Features	
Exchange	Support port configuration, port speed limit, storm suppression, storm detection, port aggregation, LACP, port statistics Support 802.1Q VLAN, VLAN based on port/MAC/protocol/subnet, GVRP, port isolation Support MAC address aging and learning limit, static MAC address binding and filtering
Redundancy	Supports fast ring network (CS-Ring V2) private protocol Support EAPS, ERPS Support STP/RSTP/MSTP
Multicast	Support IGMP Snooping Support GMRP Support IGMP v1/v2/v3 Support PIM-DM, PIM-SM
Routing	Support static routing Support RIP, OSPF dynamic routing Support VRRP
Security management	Support HTTP, HTTPS, TELNET, SSH access methods Support ACL access control list to filter L2-L4 layer data Support 802.1X port authentication and MAC address authentication Support loopback detection
Management and maintenance	Support DHCP Server/Snooping/Relay/Security Support QoS, SNMPv1/v2c /v3, SNMPv1/v2c TRAP, LLDP Support port mirroring, DDM, Ping, Traceroute Supports user management with different permissions, system log, local time synchronization, and SNTP client Support online restart, factory reset, system upgrade, configuration file upload/download
Switching performance	
Exchange method	Store and forward
Backplane bandwidth	128Gbps
Cache size	12Mbit
MAC address table	16K
LPM routing entries	768
Interface Specifications	
10 Gigabit fiber port	4 10GBase -R 10G SFP+ slots, compatible with 1000Base - X / 100Base-FX

Technical Specifications

Gigabit RJ45 port	24 10/100/1000 Base-T(X) adaptive Gigabit RJ45 ports, supporting full/half duplex, MDI/ MDI-X Adaptive
Relay	1 relay alarm output, 3-position 5.08 mm pitch locking terminal block
CONSOLE	1 CONSOLE port, using USB Type-C interface, for device debugging and command line configuration
Button	One-touch restart or factory reset button
Indicator lights	Power indicator, operation indicator, alarm indicator, interface speed and connection status indicator
Power	
Power Input	DC model: DC18~72V, anti-reverse connection, support single/ dual power supply optional AC model: AC85~264V / DC110~370V, support single/ dual power supply optional
Full load power consumption	< 22 W@ DC 24 V, < 22 W@ DC48 V, < 22 W@ A C 220 V
Connection	5 -position 7.62 mm pitch terminal block with locking
Mechanical	
Dimensions	482.6×44×280(mm) (including mounting ears)
Installation	Standard 1 9-inch 1 U rack mount
IP protection	Aluminum alloy housing, IP 40 protection grade
Weight	About 4kg
Work Environment	
Operating temperature	-40 °C ~+75 °C
Storage temperature	-40 °C ~+85 °C
Relative humidity	5%~95% (no condensation)
Industry Standards	

Technical Specifications

EMC	IEC 61000-4-2 (ESD): Level 4 IEC 61000-4-5 (Surge): Level 4 (IEC 61000-4-4 (EFT): Level 4 * The surge of DC model is Level 3 (power common mode $\pm 2\text{kV}$), and others are Level 4
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Ordering Information

Standard Model	10 Gigabit fiber port	Gigabit RJ45 port	Power
CISCOM8028GX-4XGF-24GT-DC24	4	24	Single DC 18~72V (Dual power supply optional)
CISCOM8028GX-4XGF-24GT-DC48	4	24	
CISCOM8028GX-4XGF-24GT-AD220	4	24	Single AC85~264V or DC110~370V (dual power supply optional)