CS-3008XG

8 SFP+ 10Gigabit Port Managed Fiber Optical Switch

EAN Code : 4712757150322

Introduction

CERIO CS-3008XG is a Layer 2 enhanced managed fiber switch with some Layer 3 features, specifically designed for high-speed network applications. **This fiber switch provides 8 x 10G SFP+ slot.** It supports high-speed 10Gbps connections via fiber or copper optical module. It is ideal for small to medium-sized businesses (SMBs), offering high-speed connectivity for devices such as servers, NAS, and workstations, ensuring smooth file access and sharing.

The **CS-3008XG** can be deployed in the distributed terminal area of a large network architecture, not only as the final 10G high-speed access device, but also as the backbone network switch between regions. It supports management features such as VLAN, QoS, and LACP, effectively optimizing traffic control and load balancing. It's especially suitable for fiber-based central integration of endpoint switches, providing a perfect solution for the deployment of long-distance IP surveillance cameras at the central site. This switch ensures high-speed connectivity and non-blocking packet data forwarding, making it ideal for critical applications such as IP surveillance systems. It's typically used as the fiber integration core switch for medium to large network systems, and is well-suited for scenarios such as small to medium-sized data centers, campus networks, enterprise networks, and high-speed long-distance fiber data transmission.

It provides user-friendly and intuitive management interface, supporting standard Layer 2 protocols such as STP, RSTP, and MSTP. It further enhances the ITU-T industrial telecom-grade G.8032 ERPS functionality, effectively preventing broadcast storms and improving network reliability. Its management features include IEEE 802.1Q Tag/Port-based VLAN, IEEE 802.1p-based/ Port-based QoS traffic control, WRR traffic management, and IGMP snooping, ensuring efficient traffic management. In addition, it supports Link Aggregation Control Protocol (LACP), allowing multiple devices to be interconnected and expanding the backbone link channels to enhance transmission performance. It also supports Layer 2 bandwidth management, along with loop detection and prevention mechanisms, further improving the security and stability of the enterprise network.

Highlight Features

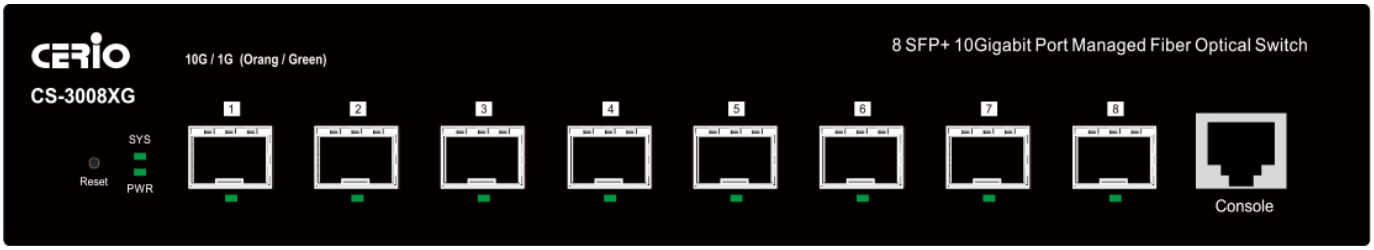
- Complying with IEEE 802.3z 1000Base-SX/LX (SFP), IEEE 802.3ae 10GBASE-X (SFP+) and IEEE 802.3x Flow Control standards.
- Supports 8-port 10G SFP+ / 1G SFP fiber slots for high-speed 1G/10G RJ45 copper module connections and Mini GBIC SFP/SFP+ fiber optical module connections, ideal for long-distance network applications.
- Supports Energy-Efficient Ethernet (EEE), IEEE 802.3az standard.
- Supports 1G/10G fiber network transmission capabilities.
- Supports Store & Forward architecture and performs forwarding and filtering.

- IEEE802.3x flow control for Full-duplex, Back Pressure function for Half-duplex operation.
- Non-blocking & Non-head-of-line blocking full-wire speed forwarding.
- Automatic Source MAC Address Learning and Aging.
- Supports VLAN and IEEE 802.1Q tag-base VLAN based on ports & VIDs; add/remove/modify tag.
- Supports Voice VLAN / MAC VLAN / Surveillance VLAN / Protocol VLAN and GVRP etc functions.
- Supports Broadcast / multicast / unknown unicast storm control.
- Provides IGMP snooping v2/v3 function and supports MLD snooping and MVR functions.
- Supports IEEE 802.3ad Link Aggregation LACP function.
- Supports 802.1x protocol to support CHAP, EAP mode and Port/MAC/Web based network access control.
- Supports RADIUS/TACACS+ and AAA Certificate function.
- Supports MAC Address Table Management, It can grasp the MAC address which connected to the associated users and in case of set in or specified Port and VLAN group situation bind the MAC Address of the user's PC or network host device.
- Supports MAC/IPv4 and DHCP Client and IPv6 Internet Protocol, IPv6 Auto-configuration mechanism and DHCPv6 Client and other functions to facilitate the setting and management of IP addresses.
- Supports DoS (Denial of Service) Defense for enhanced network security.
- Firewall Dos supports POD, LAND, UDP Blat, TCP Blat, Null /X-Man Scan Attack, TCP SYN-FIN/SYN-RST Attack, Smurf Attack and other defense function.
- Supports Link Layer Discovery Protocol (LLDP) and LLDP-MED.
- Supports DHCP Snooping function to prevent access by unauthorized hosts and DHCP servers and supports DHCP Option 82 and Option82 Circuit ID provides additional security.
- Support setting the number of MAC users, IP and MAC binding and access control list (ACL), according to the limit of each port, which can be filtered by MAC and IP address.
- Supports QoS Quality of Service, IEEE 802.1p QoS, Port-based QoS, QOS re-making, Port trust, Port speed limit, Egress queue speed limit, SP/WRR scheduling algorithms, COS mapping, DSCP mapping, IP priority mapping.
- Supports bandwidth control to set control traffic limits (inflow and outflow) for each port.
- Supports Port Mirroring function.
- Supports IEEE 802.1D Spanning Tree Protocol (STP), including BPDU Filtering and BPDU guard functions and IEEE 802.1w Rapid Spanning Tree Protocol (RSTP), IEEE 802.1s Multiple Spanning Tree Protocol (MSTP).
- Supports Industrial Carrier Class ERPS（Ethernet Ring Protection Switching）helps to build a scalable Layer 2 converged network and achieve high reliability and network stability for service providers.
- RMON (Remote Network Monitoring) provides network administrators with the ability to select network-monitoring probes with features that meet their business network needs.
- Supports IPSG (IP Source Guard) provides source IP address filtering on a Layer 2 port to prevent a malicious host from impersonating a legitimate host by assuming the legitimate host's IP address.
- Supports UDLD (Unidirectional link detection), which can monitor the link status and prevent network problems.
- Support ACL (Access Control List), including MAC ACL, IPv4 ACL, IPv6 ACL and other security control functions.
- Supports local time and PC synchronization, also can manually setting. Supports SNTP time server and

network time synchronization, automatically adjust the host and update, easy to understand the problem and restore.

- Supports Event Log, Alarm Log, Security Log, Network Log, and Protocol Log.
- Supports GUI display for monitoring network data status by port, traffic analysis by port, and device CPU and Memory loading for convenient administrative network analysis and management.
- Software management service supports setting Console / CLI / Telnet / SSH / HTTP /HTTPS/SNMP.
- Supports Simple Network Management Protocol (SNMP v1/v2c/v3) Web-based management interface.
- Support DHCP Server advanced functions include DHCP IP Pool, DHCP VLAN IP Address group setting, Client Static Binding management and table control. And display DHCP client status list.
- Supports DNS Client and DNS Server functions, can be set to operate as a DNS Server at the same time.
- Support IPv4/IPv6 Static Route and Loopback local loopback port function. Which can take port virtualization as the specified loopback address required by the Layer 3 router function. It can be quickly completed the advanced application of the layer3 network setting.
- Supports Layer3 function ARP（Address Resolution Protocol）used to map MAC addresses to IP addresses.
- Supports the Routing Information Protocol version 2 (RIPv2) to disseminate information through multicast, reducing resource consumption. This facilitates the identification of the complete state of the Layer3 link database.
- Supports Open Shortest Path First version 2 (OSPFv2). When there are changes in the network topology, it can be utilized to rapidly recalculate paths in large and heterogeneous inter-segment environments. This enables the swift identification of the complete state of the Layer 3 link database within a shorter timeframe.
- Supports the Virtual Router Redundancy Protocol version 2 (VRRPv2), enabling two gateways to function as redundant counterparts using a shared virtual IP gateway address. In the event of a failure in one of the gateway hosts, this setup ensures uninterrupted access to the Internet for local network users.
- Provides 10K Jumbo frames to improve network utilization of a large file transfers.
- Supports up to 16K MAC addresses and Up to 12Mb buffer memory.
- Supports Surge Protection 6KV to avoid the damage of the switch and connected devices.
- Supports Internal Bus Speed up to 160Gbps and the exchange rate over 119.04Mpps.
- Comes with a 19-inch rackmount kit, making it easy to deploy in various network environments and ensuring stable and efficient network connections.

Hardware Overview



LED

8 x 10Gb SFP+ Ports

Console Port

Power Cord Input

Standards & Hardware Specifications

Network Standards Conformance

IEEE 802.3z 1000Base-SX/LX (SFP)
IEEE 802.3ae10GBASE-X (SFP+)
IEEE 802.3az EEE
IEEE 802.3x Flow Control
IEEE 802.1p QoS,
IEEE 802.1Q VLAN Tag
IEEE 802.3ad Link Aggregation
IEEE 802.1x Authentication

Port Configuration

8 ports 10G SFP+ Slots
1 RJ-45 Console port

Hardware Reset

Reset button for returning to factory settings

Grounding Port

Metal case design supports surge grounding and grounding port

Surge Protection

General 6KV , Difference 2KV

ESD Protection

Air : 15KV , Contact : 8KV

Media Access Protocol

CSMA / CD

Network Media

Single-mode : 20/40/60/80/100KM

Multi-mode : 550M

Transmission Method

Store and Forward

MAC Address Table

16K

Built-in Buffer

12Mb

Jumbo Frame

10K

Data Transfer Rate

1G/10G (Half-duplex),
2G/20G (Full-duplex)

LED Indicators

1G Per Port: Link/ACT (Green)	x 8
10G Per Port: Link/ACT (Orange)	x 8
Per Unit: System Status	x 1
Per Unit: PWR Status	x 1

Internal Bus Speed/Exchange Rate

160Gbps/119.04Mpps

Switch Specifications

Link Aggregation

IEEE 802.3ad LACP Link Aggregation

Port Mirror

Supported

Quality of Service (QoS)

Supports IEEE 802.1p QoS, Port-based QoS

Bandwidth Control

Supported

UniDirectional Link Detection (UDLD)

Supported

Spanning Tree Protocol (STP)

IEEE 802.1D Spanning Tree Protocol (STP)
IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)
IEEE 802.1s Multiple Spanning Tree Protocol (MSTP)

IGMP Snooping

Supports IGMP v2/v3 and MVR

ACL Security Management

Supports IPv4 / IPv6 and MAC management

VLAN

IEEE 802.1Q Tagging VLAN , Port-Based ,Tag based VLAN

Virtual Network Management VLAN

Supports Voice VLAN / MAC VLAN / Surveillance VLAN / Protocol VLAN and GVRP

Port Security Management

Supports Broadcast / multicast / unknown unicast storm control

Authentication Security Protocol

Supports RADIUS / TACACS+ and AAA

DHCP Security Detection

Supports DHCP Snooping / DHCP Option 82/ Option82 Circuit ID

IPv6 Management Function

Supports IPv6 Internet Protocol, IPv6 Auto-configuration mechanism and DHCPv6 Client

Remote Network Monitoring (RMON)

Supported

SNMP

Supports SNMP v1/v2c/v3

SNTP Time Server

Supported

Ethernet Ring Protection Switching (ERPS)

Supported

L3/Static Route

IPv4/IPv6 Static Route supported

L3/ Address Resolution Protocol (ARP)

Support ARP advanced setting

L3/DHCP Server/ DNS Server

IPv4 and IPv6 DHCP Server / DNS Server Supported

L3/ Routing Information Protocol (RIP)

Supports RIPv2

L3/ Open Shortest Path First (OSPF)

Supports OSPFv2

L3/Virtual Router Redundancy Protocol (VRRP)

Supports VRRPv2

Environmental & Mechanical Characteristics

Power Type

Power cord: Internal Power supply

Power Consumption

≤ 35 Watts

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Power Requirements
AC 100~240VAC, 50-60Hz Auto-sensing
Operating Temperature
0° to 55° C
Storage Temperature
-40° to 70° C
Operating Humidity
10% to 90% non-condensing
Storage Humidity
5% to 90% non-condensing
Dimensions (W x D x H)
250 x 181 x 44 mm
Unit Weight
1.14kg

Production Location
TW

Certifications
FCC, CE, BSMI, RoHS-Compliant

Package Contents

Contents	
CS-3008XG Main Unit	x1
Power Cord	x1
Console Cable	x1
19” Rack Mount Brackets	x1
Warranty Card	x1