

CS-1000 Series CS-1008XG

8 SFP+ 10Gigabit Port Fiber Optical Switch



User's Guide

FCC Certifications



This Equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received; including interference that may cause undesired operation.

CE Mark Warning



This equipment complies with the requirements relating to electromagnetic compatibility, EN 55022 class A for ITE, the essential protection requirement of Council Directive 89/336/EEC on the approximation of the laws of the Member States relating to electromagnetic compatibility.

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Unpacking Information

Thank you for purchasing our Switch products. Before installation, please check that your package contains the following items.

Open the shipping cartons of the switch and carefully unpack its contents. The carton should contain the following items:

1. **CS-1008XG Main Unit x 1**
2. **Power Code x 1**
3. **User's Guide x 1**
4. **19" Rack Mount Brackets x 1**
5. **Warranty Card x 1**



Power Consumption

CS-1008XG ≤35 Watts

Dimension & Weight :

CS-1008XG 250 x181 x 44 mm /1.25Kg

Introduction

CERIO CS-1008XG is a high-performance 8-port SFP+ 10G fiber switch, offering 8 SFP+ 10Gbps slots. It supports high-speed 10Gbps connections via fiber or copper optical module, making it suitable for network environments that require high bandwidth and low latency. This switch effectively enhances network performance and meets the demands of modern networking.

The CS-1008XG is an ideal solution for small businesses or office environments, providing high-speed internal network connectivity that significantly enhances data transfer efficiency. It ensures smooth file access and sharing between servers, NAS, and workstations. It's also suitable for distributed terminal area of a large network architectures. It's fully meet the high-bandwidth requirements of the new generation of multimedia and image transmission.

The CS-1008XG provides 8 SFP+ slots, supporting connections for Mini GBIC 10G SFP+, 1G SFP fiber optical modules, or 10G and 1G RJ45 copper modules, offering flexibility for administrators in configuration. In addition to providing long-distance IP fiber device connections, its hardware backplane bandwidth capacity reaches up to 160Gbps, which not only enhances the overall system stability but also allows for easy interlinking of multiple switches through the 10G ports, expanding the overall fiber integration capability.

The CS-1008XG is 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. It's typically used as the fiber integration core switch for medium to large network systems.

Key Features

- Complying with 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 1G/10G Ethernet connection ability.
- Supports Surge Protection 6Kv and ESD Protection design.
- Provides 10K Jumbo frames to improve network utilization of a large file transfers.
- 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 hardware loop detector (LED Loop Detectors) functionality. The system can quickly display LED differences for any port that generates a loop.
- Hardware supports Loop Automatic Protection functionality. This feature automatically detects and isolates the port generating the loop. Once the loop issue is resolved, the system will automatically restore the isolated security mechanism within 30 to 60 seconds.
- Supports up to 16K MAC addresses and up to 12Mb buffer memory
- Supports Internal Bus Speed up to 160Gbps.
- Comes with a 19-inch rackmount kit, making it easy to deploy in various network environments and ensuring stable and efficient network connections.

Installation

Please make sure that there is proper heat dissipation from and adequate ventilation around the Switch. Do not place heavy objects on the Switch

Desktop / Rack Installation

This switch can be easily installed on a desktop or rack and allow easy device access for connecting cables and to the power button. A minimum of 25mm around the device is recommended for product safety.

Desktop Installation

- 1. Attach the Rubber feet provided with the switch to ensure minimal movement of the device.
- 2. Distancing the device from moisture is also highly recommended

Rack Installation

The Switch can be mounted on a standard 19" rack to allow for convenient placement and device safety. The switch is supplied with rack mounting brackets and screws for optional installation.

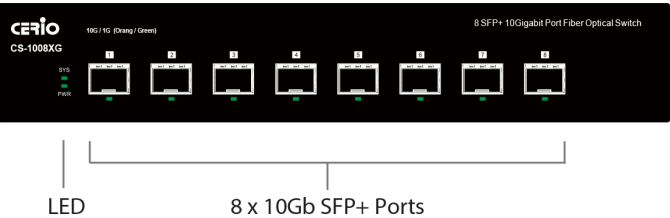
Required Mounting Materials

- 1. Two L-Brackets
- 2. 6pcs of M3 flathead screws

Mounting Procedure

- 1. Disconnect all cables from the device
- 2. Place device on a hard surface, the front of the device must be facing you.
- 3. Locate mounting holes on the sides of the unit
- 4. Install mounting brackets using M3 flathead screws on both sides of the device
- 5. Place unit onto the rack and secure with proper screws
Reconnect all the cables

Hardware Overview



Rear Panel (Power)
AC Input : (100~240V/AC, 50~60Hz)



LED Indicator:

Complete LED indicators displays the status of the Switch and network status
The front panel LEDs provides instant status feedback, and assists to monitor and troubleshoot when required.

Power LED	Power : (Power Indicator)
On :	Power On
Off :	Power Off

LINK/ACT Status LEDs (Ports 1~8)	
Green :	The port is 1G Link / Act connected.
Orange :	The port is 10G Link / Act connected.
Blinking :	A valid link is established, and there is data transmitting/receiving.

Loop Detection Status LEDs	
Orange/Green Crosswise :	When a Looping occurs, the Link/Act LED will flash orange and green crosswise.

Product Specifications

Standards & Hardware Specifications	
Network Standards Conformance	IEEE 802.3z 1000Base-SX/LX (SFP) IEEE 802.3ae10GBASE-X (SFP+) IEEE 802.3x Flow Control
Port Configuration	8ports 10G for SFP+ Slots
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	12M bits
Jumbo Frame	10K
Data Transfer Rate	1G/10G (Half-duplex), 2G/20G (Full-duplex) 1G Per Port: Link/ACT (Green) x 8 10G Per Port: Link/ACT (Orange) x 8
LED Indicators	Per Unit: System Status x 1 Per Unit: Power Status x 1
Internal Bus Speed/Exchange Rate	160Gbps/119.04Mbps
Environmental & Mechanical Characteristics	
Power Consumption	≤35Watt
Power Type	Power cord: Internal Power supply
Power Requirement	AC 100~240V AC, 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
Dimension (W x D x H)	250 x 181x 44mm
Unit Weight	1.25kg
Case of Materials	Metal
Production Location	TW
Certification	FCC/ CE/ BSMI/ RoHS-compliant