CS-1000 Series CS-1008TG

8 Port 10Gigabit Ethernet 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.

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-1008TG 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-1008TG ≤35 Watts

Dimension & Weight :

CS-1008TG 250 x181 x 44 mm /1.3Kg

Introduction

CERIO CS-1008TG is a 10G high-performance Ethernet switch that supports 8 Ethernet ports and is designed for high-bandwidth, low-latency applications such as enterprises, small and medium offices, workstations, local area networks and home entertainment.

CS-1008TG provides high-speed internal network connection for small businesses or office environments to improve data transmission efficiency and ensure smooth file access and sharing between servers, NAS, and workstations. In addition, it can be deployed in the distributed terminal area of a large network architecture. CS-1008TG adopts plug-and-play design and supports various network protocols, which makes installation of device easier and faster. Each port has Auto MDI/MDIX function, can automatically identify parallel lines and jumper connections to ensure compatibility. The built-in Auto-Negotiation traffic modulation technology can automatically detect connected devices and intelligently adjust to 100M / 1G / 2.5G / 5G / 10Gbps operation mode according to device specifications, ensuring optimal performance.

The CS-1008TG adopts non-blocking and non-head-of-line blocking full-line speed transmission technology to ensure smoother and more efficient data packet transmission. CS-1008TG provides maximum Internal Bus Speed of up to 160Gbps, greatly improving network performance and transmission efficiency, making it an ideal choice for optimizing enterprise network environments and high-performance application.

Key Features

- Complying with IEEE 802.3u100Base-TX, IEEE 802.3z 1000Base-X, IEEE 802.3bz 2.5G/5G BASE-T, IEEE 802.3an 10G BASE-T standards.
- 8 Ports 100M/1G/2.5G/10G Auto-Negotiation Ethernet Switch.
- Supports 100M/1G/2.5G/5G/10G Ethernet connection ability.
- Supports Surge Protection 6Kv and ESD Protection design.
- Half/Full-duplex capability on each TX port Auto learning networking configurations.
- 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.
- Supports TP interface Auto MDIX function for auto TX/RX swap.
- 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, making the troubleshooting process simple and easy to manage.
- Hardware supports Loop Automatic Protection functionality, which prevents broadcast storms and network paralysis caused by loops. This feature automatically detects and isolates the port generating the loop, ensuring that it does not affect other normal ports. 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 maximum Internal Bus Speed 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.

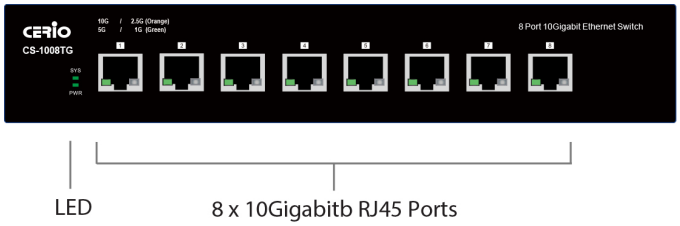
Required Mounting Materials

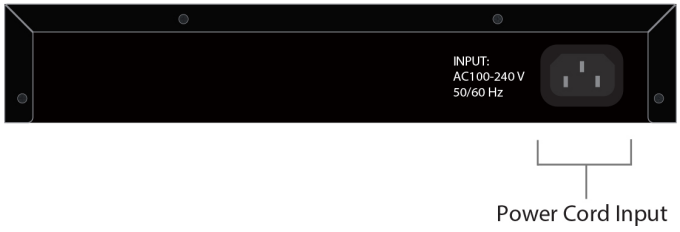
1. Two L-Brackets
2. 8pcs of M3 flathead screws

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(right)：	The port is 100M/1G Link / Act connected.
Orange(right)：	The port is 2.5G Link / Act connected.
Green(left)：	The port is 5G Link / Act connected.
Orange(left)：	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 802.3u 100Base-TX, IEEE 802.3ab 1000Base-T, IEEE 802.3x Flow Control IEEE 802.3bz 2.5G/5G BASE-T IEEE 802.3an 10G BASE-T
Port Configuration	8ports RJ-45 connectors for 10G
Media Access Protocol	CSMA / CD
Network Media	100BASE-TX: UTP Cat. 5 or up, 1000BASE-T: UTP Cat. 5 or up 2.5G /5GBASE-T: UTP Cat. 5e or up 10GBASE-T : UTP Cat. 6a or up
Transmission Method	Store and Forward
MAC Address Table	16K
Built-in Buffer	12M bits
Jumbo Frame	10K
Data Transfer Rate	100M/1G/2.5G/5G/10G (Half-duplex), 200M/2G/5G/10G/20G (Full-duplex)
Auto MDI/MDIX	Yes
LED Indicators	100M/1G Per Port: Link/ACT (On RJ45 Right/Green) x 8 2.5G Per Port: Link/ACT (On RJ45 Right/Orange) x 8 5G Per Port: Link/ACT (On RJ45 Left/Green) x 8 10G Per Port: Link/ACT (On RJ45 Left/Orange) x 8 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 Dx H)	250 x 181x 44mm
Unit Weight	1.3kg
Case of Materials	Metal
Production Location	TW
Certification	FCC/ CE/ BSMI/ RoHS-compliant