

# CS-3008TG

## 8 Port 10Gigabit Managed Switch

EAN Code : 4712757150315



## Introduction

**CERIO CS-3008TG** is a Layer 2 enhanced managed switch with some Layer 3 features, specifically designed for high-speed network applications. **This switch provides 8 x 10G Ethernet ports and is backward compatible with standards such as 100M, 1G, 2.5G, and 5G.** 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. Additionally, it can be used in video conferencing systems for businesses or schools, significantly improving the transmission efficiency of multimedia data that requires high bandwidth.

The **CS-3008TG** 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. Additionally, the built-in Auto-Negotiation traffic modulation technology automatically detects connected devices and intelligently adjusts to 100M, 1G, 2.5G, 5G, or 10Gbps operation modes based on the device specifications, ensuring optimal performance.

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.

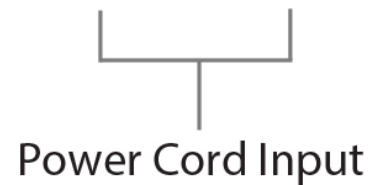
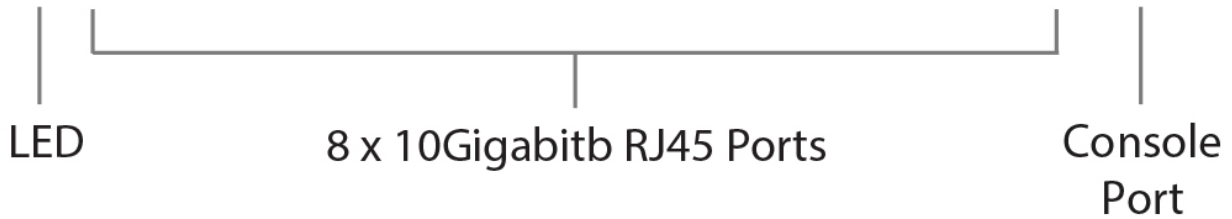
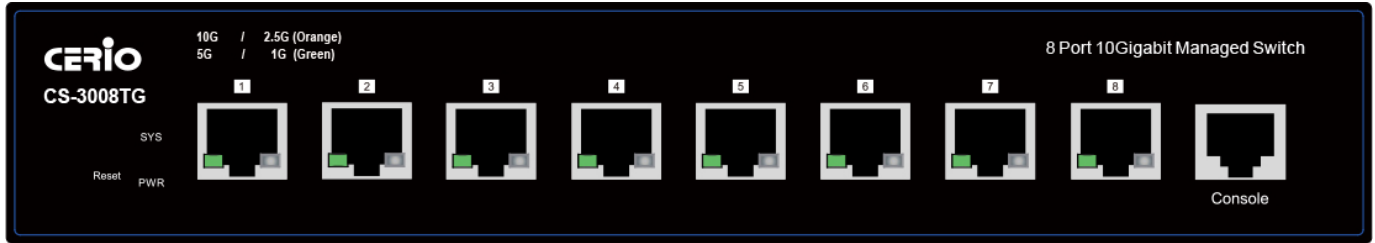
## Highlight Features

- Complying with IEEE 802.3u 100Base-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/5G/10G Auto-Negotiation Ethernet Switch.
- Supports Energy-Efficient Ethernet (EEE), IEEE 802.3az standard.
- Supports 100M/1G/2.5G/5G/10G Ethernet connection ability.
- Half/Full-duplex capability on each TX port Auto-learning networking configurations.
- 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 VLAN and IEEE 802.1Q tag-based 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 on RJ45 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



### Standards & Hardware Specifications

#### Network Standards Conformance

- IEEE 802.3u 100Base-T
- IEEE 802.3ab 1000BASE-T
- IEEE 802.3bz 2.5G/ 5G BASE-T
- IEEE 802.3an 10G BASE-T
- 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 RJ-45 10G connectors
- 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 on RJ45/Power

#### ESD Protection

- Air : 15KV , Contact : 8KV

### Media Access Protocol

CSMA / CD

### Network Media

100BASE-TX: UTP Cat. 5 or up

1000BASE-T: UTP Cat. 5e 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

12Mb

### 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 (RJ45 Right/Orange) x 8

5G Per Port: Link/ACT (RJ45 Left/Green) x 8

10G Per Port: Link/ACT (RJ45 Left/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

#### 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

1.3kg

### Production Location

TW

### Certifications

FCC, CE, BSMI, RoHS-Compliant

### Package Contents

#### Contents

<b>CS-3008TG</b> Main Unit	x1
Power Cord	x1
Console Cable	x1
19" Rack Mount Brackets	x1
Warranty Card	x1