

CS-2648XG

48 Port 10/100/1000M Gigabit Web Managed Switch with 6 SFP+ 10Gigabit Ports

EAN Code : 4712757159943



Introduction

CERIO CS-2000 Series Model: CS-2648XG is latest powerful high-performance **6 SFP+ 10Gigabit with 48 port 10/100/1000Mbps web managed switch** and supports Remote control and management through a web-based User Interface. This Layer 2 Web Managed switch supports Spanning Tree / Rapid Spanning Tree protocol, Port base IEEE 802.1Q VLAN Tagging, IGMP snooping, IEEE 802.1p port-based QoS, and Bandwidth control / Loop Detection. **CS-2648XG** with high performance gigabit design provides reliable performance and allows for easy management of auto-negotiation speeds.

The **CS-2648XG** Web Managed Switch is ideal for minimizing network downtime, connecting subnets for improved performance, and enabling the bandwidth demanded for multimedia and imaging applications. The **CS-2648XG** effectively reduces operational costs by allowing network administrators to remotely access and monitor their network, ultimately eliminating the need for constant on-site maintenance staff. **CS-2648XG** supports layer 2 web managed design also increases network security by providing enhanced network control through port management and visible MAC table addresses/clients. This device's high feature and high performance design, paired with an easy to use web interface, effectively improves both network management and efficiency for medium and large sized applications.

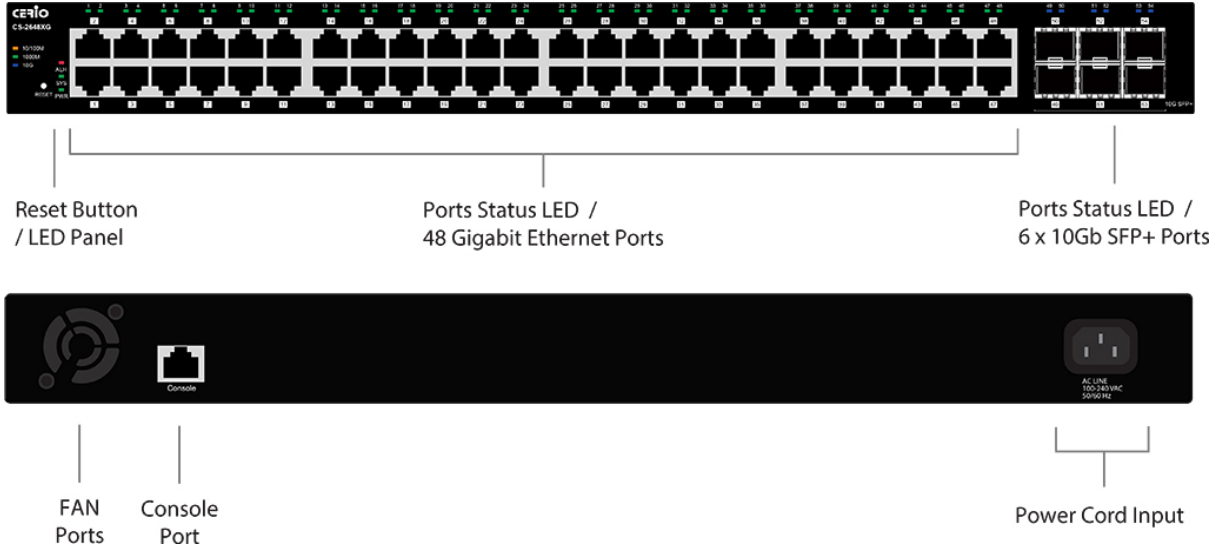
CS-2648XG is a feature packed web managed gigabit switch, providing enterprise grade function at a competitive price point. Deploying **CS-2648XG** in your network can provide network organization and improved efficiency for your devices and clients. CERIO's web-managed switches offer convenient configuration which ultimately provides premium performance, easy installation, and is sure to meet the increasing demands of growing networks.

Highlight Features

- Complying with IEEE 802.3 10Base-T, IEEE 802.3u 100Base-TX, IEEE 802.3ab 1000Base-T, IEEE 802.3ae SFP+, IEEE 802.3az EEE standards.
- Supports 48 port 10/100/1000Mbps TX Auto-Negotiation Ethernet Switch.
- Supports 6 SFP+ 10Gigabit uplink ports for long-distance network applications.
- Support system overheating or voltage error safety mechanism through LED alarm.
- Full/Half-Duplex capability on each TX port, Auto-learning networking configurations.
- Supports store & forward operation.
- Supporting the flow control: back pressure for Half-duplex and IEEE 802.3x for Full-duplex mode.
- Non-blocking & Non-head-of-line blocking full-wire speed forwarding.
- Supports network interface Auto MDIX function for auto TX/RX swap.

- Automatic Source MAC Address Learning and Aging.
- Provides 12K Jumbo frames to improve network utilization of a large file transfers.
- Supports up to 32K MAC addresses and Up to 16Mb Packet Buffer size.
- Support surge protection 6KV on the RJ45 port to prevent damage to the switch and connected equipment.
- VLAN and IEEE802.1Q tag-base VLAN based on ports & VIDs; add/remove/modify tag.
- Supports Voice VLAN / MAC VLAN / Surveillance VLAN / Protocol VLAN and GVRP.
- Supports Broadcast / multicast / unknown unicast storm control.
- Provides IGMP snooping v1/v2/v3 function and supports MLD snooping and MVR.
- Supports IEEE802.3ad Link Aggregation LACP.
- Supports 802.1x protocol to support CHAP, EAP mode and port/MAC based network access control.
- Supports RADIUS/TACACS+ and AAA Certificate function.
- Supports MAC Table Management.
- Supports MAC/IPv4 and IPv6 ACL security management.
- Supports 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 Dual Image function, which can shorten the downtime during the switch firmware upgrade or downgrade, and supports Active firmware image, Backup firmware image security backup mechanisms.
- 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.
- Each port supports limiting the number of MAC Addresses with IP and MAC address Binding.
- Supports QoS Quality of Service, Port-based QoS bandwidth management, 802.1q priority Tag based with 8 priority Queues and 8 Weights.
- Supports bandwidth control to set control traffic limits (inflow and outflow) for each port.
- Supports Port mirroring function.
- Supports Spanning Tree Protocol (STP) and Rapid Spanning Tree Protocol (RSTP) and Multiple Spanning Tree Protocol (MSTP).
- Supports UDLD (Unidirectional link detection), which can monitor the link status and prevent network problems.
- Support proxy DNS server, SNTP time server network time synchronization function, it can automatically adjust the host to update the time, easy to understand the problem and restore.
- Supports Event Log, Alarm Log, Security Log, Network Log, and Protocol Log.
- Supports file backup and recovery.
- Software management service supports setting Console / Telnet / SSH / HTTP /HTTPS/SNMP.
- 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.
- Supports web-based HTTP web management user interface and supports SNMP v1/v2c/v3.

Hardware Overview



Standards & Hardware Specifications

Network Standards Conformance

IEEE 802.3 10Base-T
 IEEE 802.3u 100Base-TX,
 IEEE 802.3ab 1000Base-T,
 IEEE 802.3ae SFP+
 IEEE 802.3x Flow Control
 IEEE 802.1p QoS
 IEEE 802.3az EEE
 IEEE 802.1Q VLAN Tag
 IEEE 802.3ad Link Aggregation

Port Configuration

48 ports RJ-45 connectors for 10/100/1000BASE-T
 6 SFP+ 10Gigabit Ports
 1 RJ45 Console Port

Hardware Reset

Reset button for returning to factory settings

Surge Protection

Support 6kV surge protection on RJ45 port

Media Access Protocol

CSMA / CD

Network Media

10BASE-T: UTP Cat. 3 or up,
 100BASE-TX: UTP Cat. 5 or up,
 1000BASE-T: UTP Cat. 5 or up

Support 10G Fiber Type

SFP+ SR, SFP+ LR

Transmission Method

Store and Forward

MAC Address Table

32K

Built-in Buffer

16Mb

Jumbo Frame

12K

Data Transfer Rate

10/100/1000Mbps (Half-duplex),
 20/200/2000Mbps (Full-duplex)
 10/20Gbps (Full-duplex)

Auto MDI/MDIX

Yes

LED Indicators

Per Port: Link / Activity Status	x48
SFP+ 10G Port: SFP+ Connection Status	x 6
Per Unit: (ALH) Overheating/Volt error Alarm	x 1
Per Unit: (PWR)	x 1
Per Unit: (SYS)	x 1

Internal Bus Speed

216Gbps

Switch Specifications

Link Aggregation	IEEE802.3ad LACP Link Aggregation Supported
Port Mirror	Supported
Quality of Service (QoS)	Supports IEEE 802.1p QoS, Port-based QoS
Bandwidth Control	Supported
Spanning Tree Protocol (STP)	Supported
Rapid Spanning Tree Protocol (RSTP)	Supported
Multiple Spanning Tree Protocol (MSTP)	Supported
IGMP Snooping	Supports v1, v2, v3 and MVR
ACL	Supports IPv4 / IPv6 and MAC Management
DHCP	Supports DHCP Snooping / DHCP Option 82 / Option82 Circuit ID
IPv6 Management Function	Supports IPv6 Internet Protocol, IPv6 Auto-configuration mechanism and DHCPv6 Client
Dual Image Function	Supports Dual image, Active firmware image and Backup firmware image
SNTP Time Server	Supported
VLAN	IEEE802.1Q Tagging VLAN ,Port-Based ,Tag based VLAN
SNMP	Supports SNMP v1/v2c/v3
Authentication Security Protocol	Supports RADIUS / TACACS+ and AAA
Virtual Network Management VLAN	Supports Voice VLAN / MAC VLAN / Surveillance VLAN / Protocol VALAN and GVRP
Port Security Management	Supports Broadcast / multicast / unknown unicast storm control

Environmental & Mechanical Characteristics




Power Consumption	26 Watts
Power Type	Power cord: Internal Power supply
Power Requirement	AC 100~240VAC, 50-60Hz Auto-sensing
Operating Temperature	0° to 50° C
Storage Temperature	-40° to 70° C
Operating Humidity	10% to 90% non-condensing
Storage Humidity	10% to 90% non-condensing
Dimensions (W x H x D)	441 x 270 x 44 mm
Unit Weight	4kg
Production Location	TW or CN
Certifications	FCC, CE, RoHS-Compliant

Package Contents




Contents	
CS-2648XG Main Unit	x1
19" Rack Mount Brackets	x1
Power Cord	x1
Console Cable	x1
Warranty Card	x1

SFP / SFP+ / RJ45 Copper Transceiver Module

1.25Gbps/Gigabit SFP/RJ45 Series

Model No.	Photo	Description	Compatible Switch
SRJ-GT		1000BASE-T SFP Copper RJ45 Transceiver 100m	CS-1224G CS-2424G CS-2208G-8P CS-2424G-24P CS-3416G-16P CS-3424G-24P
SLC-GSXM		1.25Gbps SFP SX 850nm 550m LC Multi-Mode DDM	
SLC-GLXS10		1.25Gbps SFP LX 1310nm 10KM LC Single-Mode DDM	

10Gbps SFP+/RJ45 Series

Model No.	Photo	Description	Compatible Switch
SRJ-10GT		10GBASE-T SFP+ Copper RJ45 Transceiver 30m	CS-2648XG CS-2648XG-48P
SLC-10GSRM		10GBASE-SR SFP+ 850nm 300m LC Multi-Mode DDM	
SLC-10GLRS10		10GBASE-LR SFP+ 1310nm 10KM LC Single-Mode DDM	