CS-Series CS-1224XG

24 Port 10/100/1000M Gigabit Switch with 2 SFP 10G Ports

User's Guide

FCC Certifications

CE Mark Warning

Unpacking Information

Thank you for purchasing our CS-Series 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-1224XG 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-1224XG   7.8 Watts

Dimension & Weight :

CS-1224XG   441 x190 x 44 mm (19 inch) /2.52Kg

Introduction

Gigabit with 10GbE Wired Switch

CERIO CS-1224XG is a high-performance 10/100/1000 Mbps 24 port Gigabit Ethernet Switch with 2 SFP 10G Ports. The CS-1224XG connectivity is ideal for deployment in SME/SMB core environments. Provide cost-effective powered solutions for modern enterprise businesses.

The CS-1224XG Gigabit Switch equips with 2 SFP 10G ports as uplink ports. This 10G uplink design provides an excellent solution to expend your network.   Also provides high flexibility and enabling the bandwidth demanded for multimedia and imaging applications. Users can use 10Gb ports Trunk Switch upgrade bandwidth up to 20Gbps. Moreover, the 10/100/1000 Mbps Auto-Sensing ability provides an easy way to migrate Gigabit network without pain. By integrating both data transmitting cable and power cord, the hassle of constructing your network can be eliminated, allowing you to easily connect your wired LAN network.

The CS-1224XG defines new green power saving idea in all Ports. Using the 802.3az Energy Efficient Ethernet standard, the network will automatically decrease the power usage when traffic is low with no setup required. It can solve the limitation of the network local LAN and offer the system relocation easily Plug & play and all kinds of network protocols compilation make the installation of the device both simple and quick.

Key Features

- Complying with IEEE 802.3 10Base-T, IEEE 802.3u 100Base-TX, IEEE802.3ab 1000Base-T, IEEE802.3z 1000Base-X , IEEE802.3az specifications, IEEE802.3ae 10G Fiber
- 24 Port 10/100/1000Mbps TX Auto-Negotiation Ethernet Switch
- Supports 2 SFP 10G Fiber uplink ports for IEEE 802.3ae 10G SFP-SR,SFP-LR,SFP-ER
- Supports Energy-Efficient Ethernet (EEE) , IEEE 802.3az standard
- Supports Green Ethernet features, Link-On and Cable Length Power Saving, Link-Down Power Saving, Power saving mode support to automatic cable detection
- Half/Full-duplex capability on 10/100/1000M 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
- Provides 10K Jumbo frames to improve network utilization of a large file transfers
- 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 up to 16K MAC addresses
- Up to 12M bits buffer

Installation

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. Keep the switch away from devices such as radios, broadband amplifiers, and other transmitters that might cause signal interferences
3. Distancing the device from moisture is also highly recommended

Rack Installation

The CS-1224XG 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 mounting brackets
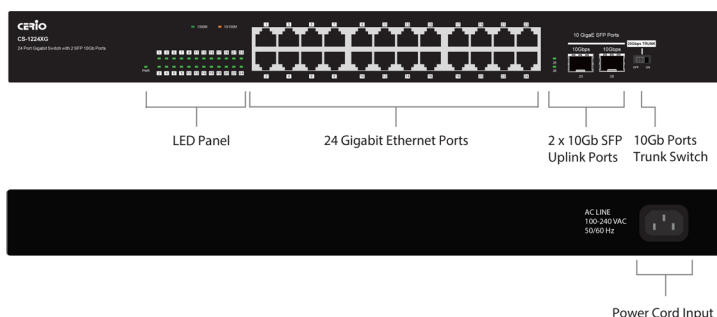2. 6 M3 flathead screws

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

Network Cable Configurations

CS-1224XG 24 Gigabit ports with auto-MDI/MDI-X support, there is no need for any Crossover cables when you connect the device to a computer, or even another switch. In addition, the auto-negotiation function auto-senses and adjusts the connected devices whether they are running at 10Mbps, 100Mbps, or 1000Mbps. To make a valid connection and obtain optimal performance using appropriate cabling, please refer to the table below.
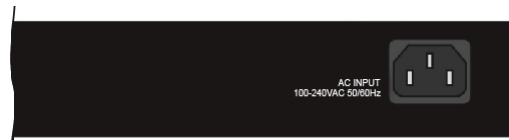
Media	Speed(Mbps)	Cable Type
10/100/1000Mbps Copper	10	Category 3, 4, 5 UTP/STP
	100	Category 5 UTP/STP
	1000	Category 5e, 6 UTP/STP
10Gbps SFP Module	10000	10G SFP-SR / SFP-LR / SFP-ER Module required differs from one that came with purchase

Hardware Overview

| LED Panel | 24 Gigabit Ethernet Ports | 2 x 10Gb SFP Uplink Ports | 10Gb Ports Trunk Switch |

Power Cord Input

Rear Panel (Power)

AC input : 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 : 10/100/1000Mbps (Ports 1~24)

Amber :	10/100M Link / Act connected.
Green :	The port is 1000M Link / Act connected.
Blinking :	A valid link is established, and there is data transmitting/receiving.

LINK/ACT Status LED : 10Gbps (Ports 25~26)

Blue :	The port is 10Gbps Link / Act connected.
Blinking :	A valid link is established, and there is data transmitting/receiving.

Product Specifications

Standards & Hardware Specifications

Standards Conformance	IEEE 802.3i 10Base-T IEEE 802.3u 100Base-TX, IEEE802.3ab 1000Base-T IEEE802.3ae 10G Fiber IEEE 802.3x Flow Control
Port Configuration	24 ports RJ-45 connectors for 10/100/1000 BASE-TX 2 ports SFP 10G Fiber uplink
Media Access Protocol	CSMA / CA
Network Media	10BASE –T: UTP Cat. 3 or up, 100BASE-TX: UTP Cat. 5 or up, 1000BASE-T: UTP Cat. 5 or up
20Gbps Trunk Switch	10GbE ports to trunk switch for on/off
Support 10G Fiber	SFP-SR , SFP-LR , SFP-ER SFP module
Transmission Method	Store and Forward
MAC Address Table	16K
Built-in Buffer	12M bits
Data Transfer Rate	10/100/1000Mbps (Half-duplex), 20/200/2000Mbps (Full-duplex) 10Gbps/10000Mbps (Full-duplex)
Auto MDI/MDIX	Yes
LED Indicators	Per Port : Link/ACT Status x 24 SFP 10Gb Port: Status x 2 Per Unit : Power x1
Internal Bus Speed	68Gbps

Environmental & Mechanical Characteristics

Power Consumption	7.8 Watt
Power Type	Power cord: Internal Power supply
Power Requirement	AC 100~240V AC, 50-60Hz Auto-sensing
Operating Temperature	0° to 40° C
Storage Temperature	-40° to 70° C
Operating Humidity	10% to 90% non-condensing
Storage Humidity	5% to 90% non-condensing
Dimension (W x H x D)	441 x 190 x 44 mm
Unit Weight	2.52kg
Certification	FCC, CE, RoHS-compliant