

# CS-Series CS-1224G

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

# Quick Installation Guide

### User's Guide



CS-1224G : Dimensions 441 x 131 x 44 (19 inch)

### Package Contents

Before you start to install this switch, please verify your package that contains the following items:

- **CS-1224G Main Unit x1**
- **19" Rack Mount Kit x1**
- **Quick Installation Guide x1**
- **Power Code x 1**
- **Warranty Card x 1**

Note: If any of these items is found missing or damaged, please contact your local supplier for replacement.

### Product Features

- Complying with IEEE 802.3 10Base-T, IEEE 802.3u 100Base-TX, IEEE 802.3ab 1000Base-T, IEEE 802.3z 1000Base-X, IEEE 802.3az specifications.
- 24 Port 10/100/1000Mbps TX Auto-Negotiation Ethernet Switch.
- Supports 2 Gigabit SFP Fiber uplink ports for IEEE 802.3z 1000Base-SX/LX.
- Supports Energy-Efficient Ethernet (EEE), IEEE 802.3az standard.
- Supports IEEE 802.1p CoS Class of service.
- Supports VLAN packet pass-through function.
- Supports Green Ethernet features, Link-On and Cable Length Power Saving, Link-Down Power Saving, Power saving mode support to automatic cable detection.
- Supports auto-detection for SFP ports / mini-GBIC module insertion.
- 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 up to 8K MAC addresses and Up to 4 .1Mb buffer memory.

### FCC Warning

This device has been tested and found to comply with limits for a Class A digital device, pursuant to Part 15 of 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 and radiates radio frequency energy and, if not installed and used in accordance with the user's manual, it may cause interference in which case users will be required to correct interference at their own expenses.

### CE Warning

This is a Class A product. In a domestic environment, this product may cause radio interference in which case the user may be required to take adequate measures.

### Introduction

The CERIO CS-1224G is a 10/100/1000Mbps 24 port Gigabit Ethernet Switch that utilize 2 Gigabit SFP uplink ports. The CERIO CS-1224G case is designed for small offices, and can be optionally upgrade to 1U" chassis. The CS-1224G is ideal for micro-segmenting large networks into smaller networks, connecting subnets for improved performance, and enabling the bandwidth demanded for multimedia and imaging applications. Moreover, the 10/100/1000Mbps 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 CERIO CS-1224G defines new green power saving idea in all Port, incorporating an on/off button to enable or disable the IEEE802.3az function. The CS-1224G 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. 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 10 Mbps, 100Mbps, or 1000Mbps.

The CS-1224G also supports Low Power Idle Mode. When Low Power Idle Mode is enabled, systems on both sides of the link can disable portions of functionality and save power during periods of low link utilization, reducing power consumption up to 81%. With its non-blocking architecture, the CERIO CS-1224G Green Ethernet switch receives and forwards traffic seamlessly. Duplex mode also doubles the bandwidth by enabling two-way communication. Every port simultaneously supports up to 2Gbps of bandwidth for all 26 ports, totaling up to 52Gbps of switching capacity to a shared total 10/100/1000

### Power Consumption

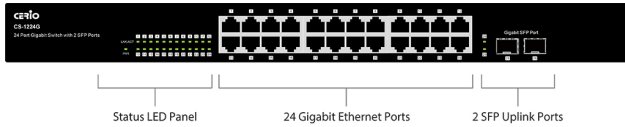
**CS-1224G** 4.7 Watts

### Dimension & Weight :

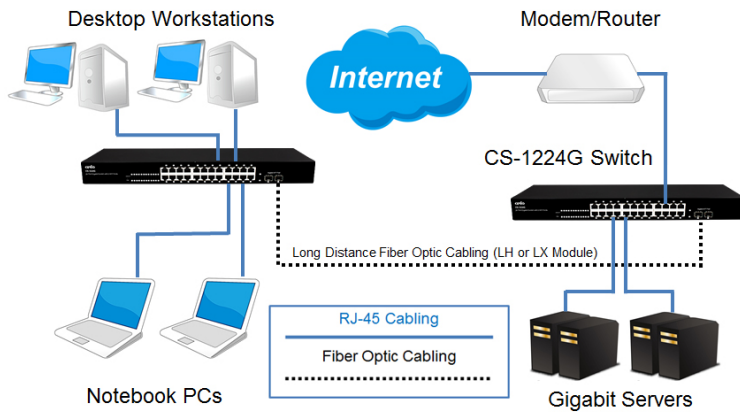
**CS-1224G** 441 x 131 x 44 mm (19 inch)

## Front Panel (LEDs)

### LED Indicators of 26 port 10/100/1000Mbps Switch



| LED      | Status   | Description                       |
|----------|----------|-----------------------------------|
| Power    | On       | Power is on.                      |
|          | Off      | Power is off.                     |
| LINK/ACT | On       | Port is for connection.           |
|          | Off      | No connection.                    |
|          | Flashing | Data is transmitting or receiving |



## Network Cable Configurations

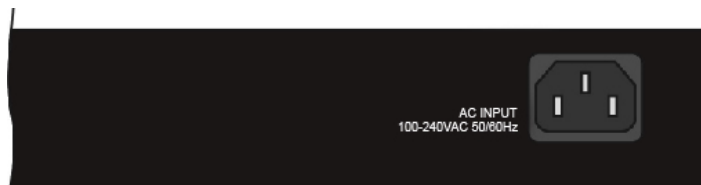
All of CS-1224G Ports support MDI/MDI-X functionality. The device supports both straight-through and crossover cables which can link the switch to PCs, Hubs, Switches, and Routers. To make a valid connection and obtain optimal performance using appropriate cabling, please refer to the table below.

| 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                                      |
| 1000Mbps Fiber (Mini GBIC required) | 1000        | Mini GBIC required differs from one that came with purchase |

## Rear Panel (Power)

### AC input

AC input (100~240V/AC, 50~60Hz)



## 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-1224G 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
6. Reconnect all the cables

## Technical Specifications

|                                |  |
|--------------------------------|--|
| Standards                      | IEEE 802.3 10Base-T<br>IEEE 802.3u 100Base-TX,<br>IEEE 802.3x Flow Control<br>IEEE 802.3ab 1000Base-T<br>IEEE 802.3z 1000Base-X<br>IEEE802.3az Energy-Efficient-Ethernet |
| Features                       | Number of Ports: 26 Ports<br>MAC Address: 8K<br>Buffer Memory: 4.1Mbit<br>Method: Store and Forward  |
| Filtering/<br>Forwarding Rates | 100Mbps port – 148,800pps<br>10Mbps – 14,880pps  |
| Transmission Media             | 10BaseT Cat. 3, 4, 5 UTP/STP<br>100BaseTX Cat. 5 UTP/STP<br>1000Base TX Cat 5e, 6 UTP/STP  |
| LED Indicators                 | Per Port: LINK/ACT<br>Per Unit: Power  |
| Power Input                    | 100~240V/AC, 50~60Hz   |
| Dimensions                     | CS-1224G : 441 x 131 x 44 (19 inch)  |
| Operating Temperature          | 0 to 50°C  |
| Storage Temperature            | -40 to 70°C  |
| Humidity                       | 5 to 90% RH (non-condensing)   |
| Production Location            | TW or CN   |
| Certifications                 | FCC , CE Class A, RoHS-Compliant   |