PoE Series CS-1008G-8P

8 Port 10/100/1000M Gigabit PoE+ 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

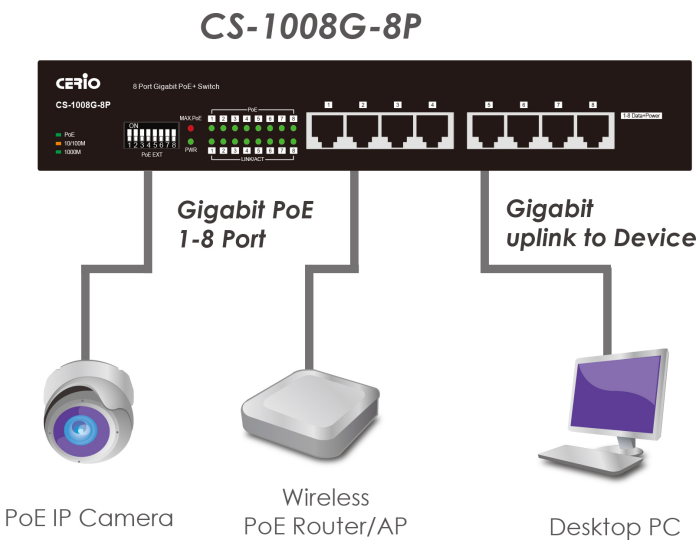
This equipment complies with the requirements relating to electromagnetic compatibility, EN 55022 class A for ITE, the essential protection requirement of Council Directive 89/336/EEC on the approximation of the laws of the Member States relating to electromagnetic compatibility.

Unpacking Information

Thank you for purchasing our PoE 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-1008G-8P 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**



Introduction

Power Over Ethernet

The CERIO CS-1008G-8P is a powerful and IEEE 802.3af/at Power over Ethernet which provides DC 44~57V Gigabit over Ethernet cables high-performance Gigabit Ethernet switch, with all 8 ports capable of 10/100Mbps or 1000Mbps auto-negotiation operation which means the switch could automatically negotiate with the connected partners on the network speed and duplex mode. It is ideal for micro-segmenting large networks into smaller, connected subnets for improved performance, enabling the bandwidth demanding multimedia and imaging applications. Moreover, the 10/100/1000Mbps auto-sensing ability provides an easy way to migrate 10Mbps to 1000Mbps network with no pain.

This switch supports 8 Port 10/100/1000M Gigabit port Power over Ethernet (PoE+), 10Mbps speed with 802.3at 30Watt PoE+ power output over distance up to 280 meters on RJ45 UTP cable. Up to 280m PoE distance allows you to expand your network via Ethernet cable to where there is no power line or outlet but where you want to fix devices such as APs, IP Cameras or IP Phones, etc.. No longer need to worry about the complicated cables and long distance which may cost you a lot of time and money. By integrating the data transmitting cable and power cord, it eliminates the effort constructing your network. Over current protection and circuit shorting protection are also supported to ensure the safety.

Key Features

- Complying with IEEE 802.3 10Base-T, IEEE 802.3u 100Base-TX, IEEE802.3ab 1000Base-T,IEEE-802.3af PoE ,IEEE802.3at PoE+
- 8port 10/100/1000Mbps TX Auto-Negotiation Ethernet Switch , supports 8 Port Gigabit PSE / PoE function, compliant with IEEE-802.3af class3 /class2/class1 and IEEE802.3at
- Ethernet Extend Mode per port DIP switch control makes transmission distance up to 280m
- Support PoE Power Maximum 30W for share 1~8 PSE/PoE Ports
- Internal 160Watt power supply supports a maximum PoE power budget of 130 Watt
- Full/Half-Duplex capability on each TX port
- Supports Store & Forward architecture and performs forwarding and filtering
- Auto-learning networking configurations
- Supporting the flow control: back pressure for Half-duplex and IEEE 802.3x for Full-duplex mode
- Broadcast storm control and supporting store & forward operation
- Support Jumbo Frame 9K
- 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 4K MAC addresses
- Up to 1.5M bits buffer

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. 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

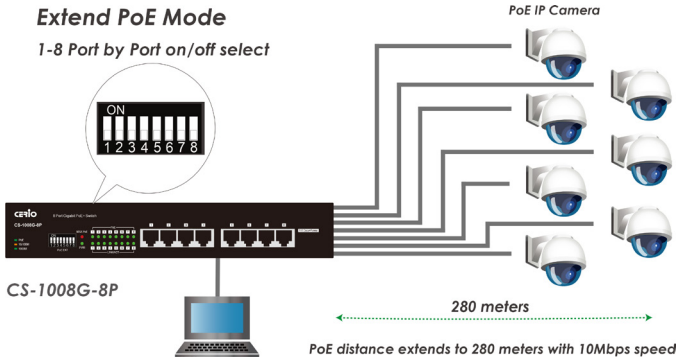
Rack Installation

The CS-1008G-8P 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.

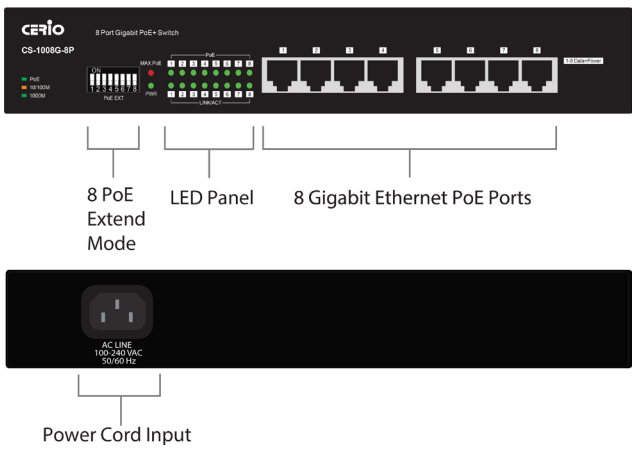
Gigabit PoE Ports (Port 1~8)
These ports are 802.3af (PoE) and 802.3at(PoE+), the PoE port will automatically activate when a compatible terminal is identified. The PoE switch will distribute power through the Gigabit ethernet ports to the connected PoE device. For devices that are not compatible, the PoE port will not supply the power to this device. This feature allows user's to freely and safely utilize the 802.3af (PoE) and 802.3at(PoE+) for Power over Lan devices on their network.

Extend PoE Mode Ports (Port 1~8)
These ports support extended PoE to 280 meters with 10Mbps data speeds transfer.

Per port to control extend mode :
If you need to extend the PoE port to extend mode function, Please select port 1 ~ 8 DIP switch to "ON" position.



Hardware Overview



LED Indicator:
Complete LED indicators displays the status of the PoE 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

Max Power. LED *Power : (PoE Alert)*

On :	Over PoE Load to 120Watt or 90% Alert budget Warning
Off :	Within PoE Load to 120Watt or 90% Alert budget Warning

PoE LEDs (Port 1 ~ Port 8) *(PoE Status)*

Green :	When the PoE powered device (PD) is connected and the port distributes power successfully
Off :	When the PoE port has failed, possible reason are: PoE Power circuit shortage Power over current: over the power current of PD's classification Out of PoE voltage of 44 ~ 57 VDC output No PoE power device (PD) connected

LINK/ACT Status LEDs (Ports 1~8)

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.

Product Specifications

Standards & Hardware Specifications

Standards Conformance	IEEE 802.3i 10Base-T IEEE 802.3u 100Base-TX, IEEE802.3ab 1000Base-T IEEE 802.3x Flow Control IEEE 802.3af Power over Ethernet(POE) IEEE 802.at Power over Ethernet Plus (POE+)
Port Configuration	8ports RJ-45 connectors for 10/100/1000Mbps (With 8 Port Gigabit PSE/ PoE+ function)
Hardware DIP Switch	Support 10Mbps /280meter transition function for PoE ports (Per port DIP switch control)
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
Transmission Method	Store and Forward
MAC Address Table	4K
Built-in Buffer	1.5M bits
Data Transfer Rate	10/100/1000Mbps (Half-duplex), 20/200/2000Mbps (Full-duplex)
Auto MDI/MDIX	Yes
LED Indicators	Per Port : Link/ACT Status x 8 Per Port: PoE Status x 8 Max. PoE : x 1 (PoE Load greater than 120Watt warning) Per Unit : Power x1
Internal Bus Speed	16Gbps

Environmental & Mechanical Characteristics

PoE Power Budget	*54V/2.7A for 130Watt(shared)for all PoE ports*
Power Consumption	12V/1A for 4.3 Watt (max. with no PoE Device connected)
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)	265 x 184 x 44 mm
Unit Weight	1.62kg
Certification	FCC, CE, RoHS-compliant