# PoE Series CS-1008G-8PX

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.

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#### Trademarks

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# **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-8PX Main Unit x1
- 2. Quick Installation Guide Booklet x1
- 3.Power Adapter x1
- 4.Warranty Card x1

## **Application**

### Gigabit 8 Port 802.3at PoE Switch



**Power Over Ethernet** 

### Introduction

### Power Over Ethernet

The CERIO CS-1008G-8PX is a powerful and complying with IEEE 802.3af/at Power over Ethernet standard which provides DC 48~57V Gigabit over Ethernet cables high-performance Gigabit Ethernet switch, with all 8 ports capable of 10/100Mbps or 1000Mbps autonegotiation 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 autosensing ability provides an easy way to migrate 10Mbps to 1000Mbps network with no pain.

The CS-1008G-8PX supports 8 Port 10/100/1000M Gigabit port Power over Ethernet (PoE+) 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. It also support desk top and wall mounting for easy installation.

### **Key Features**

- Complying with IEEE 802.3 10Base-T, IEEE 802.3u100Base-TX, IEEE 802.3ab 1000Base-T, IEEE 802.3afPoE, IEEE 802.3at PoE+
- 8 Ports 10/100/1000Mbps Auto-Negotiation Gigabit Switch, including 8 Ports PSE/ PoE+ function, complying with IEEE 802.3af/at standard
- Supporting the power up to 30Watt/15.4Watt/ 7.5Watt/4Watt for each PSE/PoE+ port with bundle Power Adapter have 90Watt share for 8 PoE ports
- 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
- 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 1.5Mb bits buffer

### **Installation**

The setup of the switch can be performed using the following steps:

- Visually inspect the DC jack and make sure that is fully secured to the power adapter
- Make sure that there is proper heat dissipation from and adequate ventilation around the Switch. Do not place heavy objects on the Switch

### Cables Installation

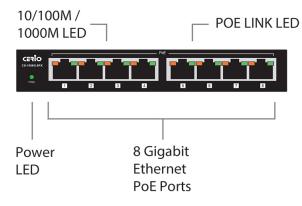
The Switch support 8 port 10/100/1000Mbps Gigabit Ethernet ports and Port 1 – Port 8 are Gigabit PoE Enabled ports, these PoE port will automatically activate when a compatible terminal is identified. The Switch will supply power through the Ethernet port to the connected PoE powered device (PD) For legacy devices that are not compatible, the PoE port will not offer power to this device. This feature allows users to freely and safely mix legacy and Power over LAN compatible devices on their network.

The Switch supports 10Mbs Ethernet or 1000Mbps Gigabit Ethernet and it runs both in half and full duplex mode using two pair of Category 5 cable. These RJ45 ports are Auto-MDI type port. The Switch can auto negotiate the MDI-II or MDI-X type, so you can connect any RJ-45 cable regardless if it is a standard or crossover cable.

#### Gigabit Ethernet Port / PoE Ports (Port 1~8)

These ports support network speeds of either 10Mbps or 100Mbps or 1000Mbps, and can operate in half and full-duplex transfer modes. These ports also support automatic MDI/MDIX crossover detection And These all 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.

### 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

### 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 48 ~ 57 VDC output
	No PoE power device (PD) connected

### LINK/ACT Status LEDs (Ports 1~8)

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

### **Product Specifications**

#### **Standards & Hardware Specifications**

	IEEE 802.3 10Base-T
M - 4 1-	IEEE 802.3u 100Base-TX,
Network Standards	IEEE 802.3ab 1000Base-T,
Conformance	IEEE 802.3x Flow Control

Conformance IEEE 802.3x Flow Control IEEE 802.3af Power over Ethernet (PoE)

IEEE 802.3at Power over Ethernet Plus (PoE+) 8ports RJ-45 connectors for 10/100/1000Mbps

Port Configuration (With 8 Ports PSE/ PoE+ function )

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
Jumbo Frame 9K

Data Transfer Rate 10/100/1000Mbps (Half-duplex), 20/200/2000Mbps (Full-duplex)

Auto MDI/MDIX Yes

Per Gigabit Port:(Link/Act): Status x 8

**LED Indicators** PoE : Status x 8

Per Unit: Power x 1

Internal Bus Speed 16Gbps

### **Environmental & Mechanical Characteristics**

Power Supply 90Watt External Power Adapter
PoE Power
Budget 80Watt shared for all PoE Ports

Power Consumption 2.8Watt

**PoE Power Output** Up to 30W per port

**Power Requirement** DC In : Input Voltage: 48 ~ 57Volt

 $\begin{array}{ll} \textbf{Operating} & 0° \text{ to } 55° \text{ C} \\ \textbf{Temperature} & \textbf{Storage Temperature} & -40° \text{ to } 70° \text{ C} \\ \end{array}$ 

**Operating Humidity** 10% to 90% non-condensing **Storage Humidity** 5% to 90% non-condensing

Dimension ( W  $\times$  H  $\times$  D )

Unit Weight 0.36kg
Case of Materials Metal

**Certification** FCC, CE, RoHS-compliant