

PoE Series CS-1005G-4P

5 Port 10/100/1000M Small Switch with 4 Port PoE+



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.

Company has an on-going policy of upgrading its products and it may be possible that information in this document is not up-to-date. Please check with your local distributors for the latest information. No part of this document can be copied or reproduced in any form without written consent from the company.

Trademarks:

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Unpacking Information

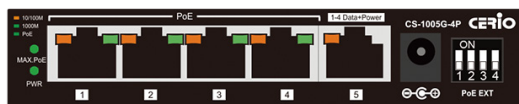
Thank you for purchasing our PoE series products. Before installation, please check that your package contains the following items.

Open the shipping cartons of the switch and carefully unpack its contents. The carton should contain the following items:

1. CS-1005G-4P Main Unit x 1
2. AC/DC Power Adapter x 1
3. User's Guide x 1
4. Warranty Card x 1

Application

CS-1005G-4P



PoE IP Camera

Wireless
PoE Router/AP

Desktop PC

Introduction

Power Over Ethernet

The CERIO CS-1005G-4P 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 5 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 4 Port 10/100/1000M Gigabit port Power over Ethernet (PoE+), Power Supply up to 250m(820 feet). Up to 250m 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+
- 5 Ports 10/100/1000Mbps Auto-Negotiation Gigabit Switch, Have 4 Ports PSE/ PoE function compliant with IEEE802.3at class4 (30Watt) IEEE-802.3af class3 (15.4Watt); IEEE802.3af class 2 (7.5Watt)
- Ethernet Extend Mode per port switch control makes transmission distance up to 250m
- Support PoE Power Maximum 30W for share 1~4 PSE/PoE Ports With bundle Power Adapter have 72Watt for 4 PoE port
- 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 9216 byte
- 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 2K MAC addresses
- Up to 1M 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 5 port 10/100/1000Mbps Gigabit Ethernet ports and Port 1 – Port 4 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 10Mbps 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 PoE Ports (Port 1~4)

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 Port (Port 1~4)

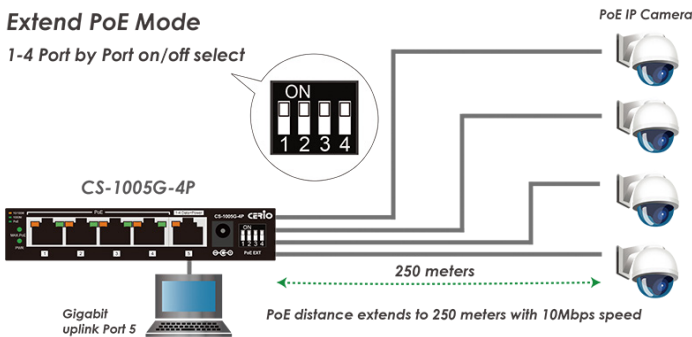
These ports support extended PoE to 250 meters with 10Mbps data speeds transfer.

Per ports to control extend mode :

If you need to extend the PoE port to extend mode function, Please select port 1 ~ 4 DIP switch to "ON" position.

Extend PoE Mode

1-4 Port by Port on/off select



Gigabit Ethernet Port (Port 5)

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



4 Gigabit Ethernet PoE Ports 1 Gigabit Ethernet Uplink Port DC Power Input 4 PoE Extend Mode



Power on/off Switch

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 70% Alert budget Warning
Off :	Within PoE Load to 70% Alert budget Warning

PoE LEDs (Port 1 ~ Port 4) (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 1~5)

Green (Port 1~ 4)	The port is 1000M Link / Act connected.
Blinking Green (Port 1~ 4)	A valid link is established, and there is data transmitting/receiving.
Amber (Port 1~ 5)	10/100M Link / Act connected.

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+)
5ports RJ-45 connectors for 10/100/1000Mbps (With 4 Port Gigabit PSE/ PoE+ function)

Port Configuration

Hardware on/off

Hardware DIP Switch

Media Access Protocol

Network Media

Transmission Method

MAC Address Table

Built-in Buffer

Data Transfer Rate

Auto MDI/MDIX

LED Indicators

Internal Bus Speed

Power Switch
DIP 1~4 on / off switch for 250 meters distance with 10Mbps transition PoE extend mode
CSMA / CA
10BASE -T: UTP Cat. 3 or up, 100BASE-TX: UTP Cat. 5 or up, 1000BASE-T: UTP Cat. 5 or up
Store and Forward
2K
1M bits
10/100/1000Mbps (Half-duplex),
20/200/2000Mbps (Full-duplex)
Yes
Per PoE port : PoE Status x 4
Per Gigabit (Link / Act) :Status x 5
Max. PoE : x 1 (PoE Load greater than 70% warning)
Per Unit : Power x1
10Gbps

Environmental & Mechanical Characteristics

PoE Power Budget

Power Consumption

Power Requirement

Operating Temperature

Storage Temperature

Operating Humidity

Storage Humidity

Dimension (W x H x D)

Certification

55V/1.3A for 60Watt (shared) for all PoE Ports (max. with share per Port PoE Device connected) for Ports 1-4 Only .
2 Watt (max. with no PoE Device connected)
External "up to 72Watt" switch power adapter
0° to 40° C
-40° to 70° C
10% to 90% non-condensing
5% to 90% non-condensing
121 x 75 x 26 mm
FCC, CE, RoHS-compliant