

# HS-Series HS-1005M

5 Port 10/100/1000/2500M Multi Gigabit 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.

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.

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## Unpacking Information

Thank you for purchasing our HS-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. HS-1005M Main Unit x 1
2. Power Adapter x 1
3. User's Guide Quick Installation Guide Booklet x 1
4. Warranty Card x 1

## Application

### Multi-Giga Connection Sample



## Introduction

CERIO HS-1005M is a plug & play ultra-high speed and high-performance network switch. It supports 5 port 10/100/1000/2500Mbps Multi Gigabit Ethernet ports. All ports support Auto-Negotiation traffic modulation function, which helps to optimize the transmission speed and performance of each connected device. It supports existing conventional 10/100/1000Mbps Gigabit Ethernet equipment and new generation 2.5GbE network equipment. Whether you want to upgrade the office network or home use, HS-1005M can achieve faster and smoother bandwidth and transmission capabilities for you to achieve more flexible network applications

CERIO HS-1005M can use existing CAT 5e cables to enjoy ultra-high-speed network transmission, it's eliminating construction costs, and realizing economical network upgrades. HS-1005M with fanless design, simple and convenient operation, no need to configure software, plug and play. It's able to meet the hyper-converged large-scale data centers, AI applications, 4K high-quality image transmission, WiFi 6 wireless base stations, cloud data centers needs, etc., and provides stable and efficient transmission. The HS-1005M 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. Moreover, it supports desktop and wall mounting installation, making it more convenient and safer for you to use.

## Highlight Features

- Complying with IEEE 802.3 10Base-T, IEEE 802.3u 100Base-TX, IEEE802.3ab 1000Base-T, IEEE802.3bz 2.5G BASE-T and IEEE 802.3az EEE specifications.
- 5 Port 10/100/1000/2500Mbps TX Auto-Negotiation Ethernet Switch.
- Supports Energy-Efficient Ethernet (EEE) , IEEE 802.3az standard.
- Half/Full-duplex capability on each TX port Auto-learning networking configurations.
- Supports Store & Forward architecture and performs forwarding and filtering.
- IEEE802.1x flow control for Full-duplex, Back Pressure function for Half-duplex operation.
- Provides 12K 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.
- Supports 12Mb buffer memory.
- Supports desktop and wall mounting installation.

## 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

### Desktop Installation

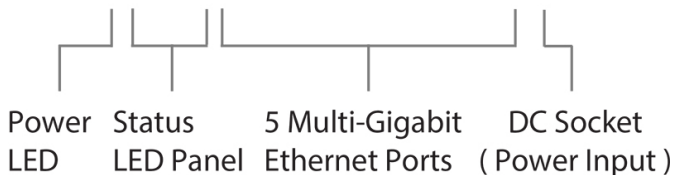
1. Attach the Rubber feet provided with the switch to ensure minimal movement of the device
2. Keep the switch away from devices such as radios, broadband amplifiers, and other transmitters that might cause signal interferences
3. Distancing the device from moisture is also highly recommended

### Cables Installation

HS-1005M has 5 Multi Gigabit ports, when connecting the device to a computer or even another switch, no crossover cable is required. In addition, the auto-negotiation function will automatically detect and adjust the connected devices, whether they are running at 10Mbps, 100Mbps, 1000Mbps or 2500Mbps. In order to make an effective connection and use the appropriate cable for the best performance, please refer to the table below.

Media	Speed(Mbps)	Cable Type
100/1000/2500 Mbps Copper	100	Category 5 UTP/STP
	1000	Category 5e, 6 UTP/STP
	2500	Category 5e, 6 UTP/STP

### Hardware Overview



Dimension : 160 x 111 x 26mm ( W x D x H )

Weight : 0.46kg

## 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 : 100/1000/2500Mbps (Ports 1~5)

Amber :	100M/1000M Link / Act connected.
Green :	2500M Link / Act connected.
Blinking :	A valid link is established, and there is data transmitting/receiving.

## Product Specifications

### Standards & Hardware Specifications

<b>Network Standards Conformance</b>	IEEE 802.3 10Base-T IEEE 802.3u 100Base-TX, IEEE 802.3ab 1000Base-T, IEEE 802.3bz 2500Base-T IEEE 802.1x Flow Control IEEE 802.3az EEE
<b>Port Configuration</b>	5ports RJ-45 connectors for 10/100/1000/2500Mbps
<b>Media Access Protocol</b>	CSMA / CD 10BASE -T: UTP Cat. 3 or up, 100BASE-TX: UTP Cat. 5 or up, 1000BASE-T: UTP Cat. 5 or up 2500BASE-T: UTP Cat. 5e or up
<b>Network Media</b>	
<b>Transmission Method</b>	Store and Forward
<b>MAC Address Table</b>	16K
<b>Built-in Buffer</b>	12Mb
<b>Jumbo Frame</b>	12K
<b>Data Transfer Rate</b>	10/100/1000/2500Mbps (Half-duplex), 20/200/2000/5000Mbps (Full-duplex)
<b>Auto MDI/MDIX</b>	Yes Per Port : Link Status x 5 Green(2500Mbps Link) Amber(100/1000Mbps Link)
<b>LED Indicators</b>	Per Unit(PWR) x 1
<b>Internal Bus Speed</b>	25Gbps
<b>Environmental &amp; Mechanical Characteristics</b>	
<b>Power Type</b>	DC-Jack : for bundled External Power adapter
<b>Power Consumption</b>	4.8Watt
<b>Power Requirement</b>	External 12 VDC 1A DC Input
<b>Operating Temperature</b>	0° to 45° C
<b>Storage Temperature</b>	-40° to 70° C
<b>Operating Humidity</b>	10% to 90% non-condensing
<b>Storage Humidity</b>	5% to 90% non-condensing
<b>Dimension ( W x H x D )</b>	160 x 111 x 26mm
<b>Unit Weight</b>	0.46kg
<b>Case of Materials</b>	Metal
<b>Production Location</b>	TW or CN
<b>Certification</b>	FCC, CE, RoHS-compliant
<b>Package Contents</b>	
<b>HS-1005M Main Unit</b>	X1
<b>Quick Installation Guide Booklet</b>	X1
<b>Power Adapter</b>	X1
<b>Warranty Card</b>	X1