FCC Certifications

This Equipment has been tested and found to comply with the limits for a Class B 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 the EMC Directive 2004/108/EC, the Low Voltage Directive 2006/95/EC, and the RoHS Directive 2011/65/EU.

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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Introduction

The device is a powerful, high-performance Gigabit Ethernet switch, with 8 ports capable of 10/100/1000 Mbps auto-negotiation operation (NWay), 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 10/100Mbps to 1000Mbps network. Compared to the shared 10Mbps or 100Mbps networks, the switch delivers a dedicated 10/100/1000Mbps connection to every attached client without bandwidth congestion issue. This switch also supports auto MDI/ MDI-X function. Each port could be used to connect to another switch or hub without crossover RJ-45 cable.

Store-and-forward switching mode promises the low latency plus eliminates all the network errors, including runt and CRC error packets. To work under full-duplex mode, transmission and reception of the frames can occur simultaneously without causing collisions as well as double the network bandwidth. Moreover, IEEE 802.3az Energy Efficient Ethernet is supported to save power consumption

The switch is plug and play without any software to configure and also fully compliant with all kinds of network protocols.

Before you start to install the switch, check the following contents in this package：

1. One 8–Port Gigabit Ethernet switch
2. One external power adapter
3. Four rubber feet
4. User's Manual

Key Features

- ➢ Complies with 10BASE-T specifications of the IEEE802.3 standard

- ➢ Complies with 100BASE-TX specifications of the IEEE802.3u standard

- ➢ Complies with 1000BASE-T specifications of the IEEE802.3ab standard

- ➢ 8 * 10/100/1000Mbps RJ-45 Nway ports

- ➢ Supports MDI/MDI-X auto crossover

- ➢ Supports full and half duplex operation on all ports

- ➢ Supports back-pressure (half duplex) and full duplex flow control (IEEE 802.3x)

- ➢ Wire-speed packet filtering and forwarding rate

- ➢ Store-and-forward architecture filters fragment & CRC error packets

- ➢ Supports extensive LED indicators for network diagnostics

- ➢ Supports Loop Detection

- ➢ Support 802.1p QoS

- ➢ Support Green Ethernet (Link-On Cable Length Power Saving and Link-Down Power Saving)

- ➢ Supports IEEE 802.3az

LEDs Definition

The switch contains one power LED for the device, Link/Act LED for each port that shows the activities and information of the ports.

Please refer to the following table for LEDs definition:
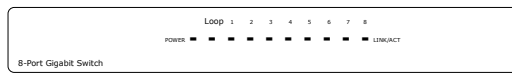
LED	Status	Operation
Power	Steady Green	The switch is powered on
	Off	The switch is powered off
Link/ ACT	Steady Green	Valid port connection
	Blinking Green	Valid port connection and there is data transmitting/ receiving
	Off	Port disconnected
Loop	Blinking Red	Loop is detected
	Off	Loop is not detected

Station Connection

Connect each station to the switch by twisted-pair cable. Plug one RJ-45 connector into a RJ-45 port of the switch, and plug the other RJ-45 connector into the station's network adapter. Power on the switch and then system is ready.

Switches Connection

In making a switch interconnection, you could use any port to connect another switch with straight or crossover cable. As all the ports support auto MDI / MDI-X function, using a straight cable to make a switch-to-switch connection is allowed.

For cable selection, refer to the following table：

Network Speed	Cable Type	Max. Length
10Mbps	Cat. 3, 4, 5 UTP/STP	100 meters
100Mbps	Cat. 5 UTP/STP	100 meters
1000Mbps	Category 5e, 6 UTP/STP	100 meters

Installation

To make this switch perform well, we strongly recommend below installation environment:

1. The switch is placed with appropriate ventilation environment. A minimum 25mm space around the unit is recommended.

2. The switch and the relevant components are away from sources of electrical noise such as radios, transmitters and broadband amplifiers.

3. The switch is away from environments beyond recommend moisture.

If the device is with wall mount design, wall mount

installation step is as below.

1. Screw the two provided screws into the wall 150 mm apart horizontally. Leave a small gap between the head of the screw and the wall. The gap should be big enough for the screw heads to slide into the screw slots and the connection cables to run down the back of the switch.

2. Align the holes on the back of the switch with the screws on the wall. Hang the switch on the screws.

Product Specifications

Standard	IEEE802.3 10BASE-T IEEE802.3u 100BASE-TX IEEE802.3ab 1000BASE-T IEEE802.3x full duplex flow control and back-pressure for half duplex IEEE802.3az Energy Efficient Ethernet IEEE802.1p QoS
Interface	8* 10/100/1000 Mbps RJ-45 ports
Network Data Rate	10/100/1000 Mbps Auto-negotiation
Transmission Mode	10/100Mbps: Full-duplex, Half-duplex 1000Mbps: Full-duplex
Switching Capacity	16Gbps
Switching Forwarding Rate	11.9Mpps
Buffer Memory	256K bytes
MAC Address Table	8K
Jumbo Frame	9K bytes
Temperature	Operating: 0°C ~ 40°C (32°F ~104°F) Storage: -20°C ~ 70°C (14°F ~158°F)
Humidity	Operating: 10% ~ 90% RH, non-condensing Storage: 5%~90% RH, non-condensing
LED Indications	System: Power Ports: Link/Act Loop: Loop detection
Power Supply	External power adapter 5V/1A
EMI	FCC, CE Class B, LVD