



10/100 MBPS FAST ETHERNET
5/8-PORT DESKTOP SWITCH



(DN-50012)



(DN-50022)

User Manual

FCC STATEMENT

Every 10/100 Switch has been tested and complies 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 in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used according to the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which is found by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

1. Reorient or relocate the receiving antenna
2. Increase the separation between the equipment or devices
3. Connect the equipment to an outlet other than the receiver
4. Consult a dealer or an experienced radio/TV technician for assistance

Chapter 1:

Introduction

This newly redesigned 5 Port and 8 Port 10/100 Switch can significantly increase your network traffic speed. A switch serves the same function as a hub in a network design tying your network equipment together. But unlike a single-minded hub which divides the network's bandwidth among all the attached devices, a switch delivers full network speeds at each port. Installing this cost-effective 5 Port and 8 Port 10/100 Switch can potentially increase your network speed by five, eight times! It's the perfect way of integrating 10Mbps Ethernet and 100Mbps Fast Ethernet devices, too. All ports are auto speed negotiating, and have automatic MDI/MDI-X crossover detection, so you don't have to worry about the cable type. Each port independently negotiates for best speed and half- or full-duplex mode, for up to 200Mbps of bandwidth per port. Fast store-and-forward switching prevents damaged packets from being passed on into the network. The new, ultra-compact case design is sure to fit into your workgroup environment. Let the 5, 8 Port 10/100 Switch kick your 10/100 network into high gear.

Features

- Complies with the IEEE802.3 10Base-T Ethernet, IEEE802.3u 100Base-TX
- 5/8 ports 10/100Mbps TX Auto-Negotiation Ethernet Switch
- Full-Half-Duplex capability on every TX port
- Supports TP interface Auto MDIX function for auto TX/RX swap
- Automatic Source MAC Address Learning and Aging
- Supports Store & Forward architecture and performs forwarding and filtering
- Broadcast Storming Filter Function
- IEEE802.3x Backpressure for Full-Duplex
- Back Pressure function for Half-duplex operation
- Runt and CRC Filtering eliminates erroneous packets to optimize the network bandwidth
- Support to handle up to 1522 bytes packet
- LED indicators for simple diagnostics and management
- Plug and Play

Specifications

- Standard:
 - IEEE802.3 10Base-T Ethernet
 - IEEE802.3u 100Base-TX Fast Ethernet
- Network Media:
 - 100Base-TX – UTP/STP category 5 cable
 - 10Base-T – UTP/STP category 3 or 5 cable
- Connector: STP RJ-45 port for 10/100Mbps TX
- LED indicators:
 - System – Power LED.
 - Individual port – link/activity LEDs
- Dimension: 131mm(L) x 71mm(W) x 28mm(H)
- Temperature: Operating – 0°C to 50°C Storage – -20°C to 70°C
- Humidity: Operating – 10% to 90% RH Storage – 5% to 90% RH
- Input Power Requirement: 120VAC, 60Hz
- Registrations: FCC Part 15 Class A, CE

Chapter 2:

Hardware Description

This section describes the hardware features of the 5/8 Port Switch. familiarize yourself with its display indicators, and ports. Front panel illustrations in this chapter display the unit LED indicators. Before connecting any network device to the Switch, read this chapter carefully.

■ Front Panel

The unit front panel provides a simple interface monitoring the Switch. It includes a power led and 5/8 led indicator for each port.

■ LED Indicators

| LED Function | Color | Description |
|--------------|-------|--|
| PWR | Green | Lit: Power on |
| LNK/ACT | Green | Lit: Indicates the adapter is connected to switch; Flash: Indicates data in or out the port |

■ Rear Panel

The rear panel of the 5/8 Port Switch indicates 5/8 RJ-45 PORT.



Figure of 5/8 Port Smart Switch rear panel

■ Side Panel

The side panel of the 5/8Port Switch indicates a AC inlet, which accepts 100-240V 50/60Hz Power adapter.



Chapter 3:

Hardware Installation

- Place the Switch on a smooth surface
- Connect the output of power cord to the AC-inlet of the Switch.
- Connect other IEEE802.3 compatible network device(Hub ,Switch ,PC) to one port of the Switch using Category 3/4/5 UTP/STP cabling.
- Connect another IEEE802.3 compatible network device (Hub , Switch ,PC) to another port of the Switch by following the same process as described in Step3.

Notice:

The cable distance between the Switch and other IEEE802.3 compatible network device should not exceed 100 meter.

Make sure the wiring is correct

It can be used Category 3/4/5 cable in 10 Mbps operation. To reliably operate your network at 100Mbps, you must use an Unshielded/shielded Twisted-Pair (UTP/STP) Category 5 cable, or better Data Grade cabling. While a Category 3 or 4 cable may initially seem to work, it will soon cause data loss.

All kinds of IEEE802.3 compatible network device (Hub , Switch ,PC)can connect to the Switch by using straight-through wires or crossover wires because of Switch's auto MDIX function.

Chapter 4:

Hardware Troubleshooting

This chapter contains information to help you solve problems. If the Switch is not functioning properly, make sure the Switch was set up according to instructions in this manual.

1. The Power LED is not lit

Solution:

- Check if the AC power cord is well connected. Try to unplug and plug back the power cord to the LAN Switch or try another power cord.
- Check if the AC power source is in good condition.

2. The Link LED is not lit

Solution:

- Make sure the Switch configuration is consistent with the connecting device
- Check the cable connections.
- Make sure the cable distance between the Switch and other IEEE802.3 compatible network device should not exceed 100 meter.

3. Performance is bad

Solution:

- a. Check the full duplex status of the Ethernet Switching. If the Ethernet Switching is set to full duplex and the partner is set to half duplex, then the performance will be poor.
- b. Make sure the cable between the switch and other IEEE802.3 compatible network device is Category 5 UTP at 100Mbps operation.

4. Some stations can not talk to other stations located on the other port

Solution:

- a. Check status of the Link LED to make sure the link is correct.
- b. Make sure that the workstation's network configuration is correct, modify the network configuration of workstation if need.
- c. Please reset the switch if need.

