

# 8-Port 10/100/1000 BASE-T Unmanaged Switch 

## User Guide

Regulatory Approval

- FCC Class A
- UL 1950
- CSA C22.2 No. 950
- EN60950
- CE
- EN55022 Class A
- EN55024

Canadian EMI Notice
This Class A digital apparatus meets all the requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numerique de la classe A respecte toutes les exigences du Reglement sur le materiel brouilleur du Canada.

European Notice
Products with the CE Marking comply with both the EMC Directive (89/336/EEC) and the Low Voltage Directive (73/23/EEC) issued by the Commission of the European Community Compliance with these directives imply conformity to the following European Norms:

EN55022 (CISPR 22) - Radio Frequency Interference
EN61000-X - Electromagnetic Immunity
EN60950 (IEC950) - Product Safety

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You can reach Transition Networks technical support at:
E-mail: support@transition.com
Telephone: +1.800.260.1312 x 200
Fax: +1.952.941.2322
Transition Networks
6475 City West Parkway
Eden Prairie, MN 55344
United States of America
Telephone: +1.800.526.9267
Fax: : +1.952.941.2322
http://www.milan.com
info@ Transition.com
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## FCC STATEMENT

This equipment has been tested and found to comply with the limits for a class A device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a commercial installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with instructions, may cause harmful interference on radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case, the user will be requires to correct the interference at the user's own expense.

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## Introduction

The 8-port 10/100/1000BASE-T Switch with Auto MDI/MDIX is an unmanaged multi-port Switch that can be used to build high-performance switched networks. This switch is a store-and-forward device that offers low latency for high-speed networking. The Switch is designed for the core of the network backbone computing environment to solve traffic block problems at SME (small, medium enterprise) businesses.

The 8-port 10/100/1000BASE-T Switch features a "store-and-forward" switching technology. This allows the switch to auto-learn and store source addresses in an 8K-entry MAC address table.

## Features

■ Conforms to IEEE 802.3, 802.3u, 802.3ab and 802.3x
■ 8 Gigabit copper SOHO switch, compact size with universal internal power

- Auto-MDIX on all ports
- 16 Gbps back-plane
- N-Way Auto-Negotiation
- 8K MAC address table
- Back pressure half duplex
- Flow control full duplex

■ Store-and-Forward switching architecture

- 144Kbytes memory buffer
- True non-blocking switching

■ Support 8Kbytes Jumbo Frame

## Package Contents

Unpack the contents of the switch and verify them against the checklist below.

- 8-port Switch
- Power Cord.
- User Guide.


8-port Switch


Power Cord
Package Content
 User manual

Compare the contents of your switch package with the standard checklist above. If any item is missing or damaged, please contact your local dealer for service.

## Hardware Description

## Physical Dimensions

The physical dimensions of the Switch is $165 \mathrm{~mm} \times 100 \mathrm{~mm} \times 32.5 \mathrm{~mm}(\mathrm{~L}$ x W x H)

## Front Panel

The front panel of the 8-Port Gigabit switch consists of LED-indicators (100/1000, Link/Activity, Full duplex/Collision) for each Gigabit port and power LED-indicator for unit.


RJ-45 Ports (Auto MDI/MDIX): 8 10/100/1000 N-way auto-sensing for 10Base-T, 100Base-TX or 1000Base-T connections. (In general, MDI means connecting to another Hub or Switch while MDIX means connecting to a workstation or PC. Therefore, Auto MDI/MDIX allows you to connect to another Switch or workstation without changing to non-crossover or crossover cabling.)

## LEDs Indicators

The LED Indicators gives real-time information of systematic operation status. The following table provides descriptions of LED status and their meaning.

| LED | Status | Description |
| :---: | :---: | :---: |
| Power | Green | Power On |
|  | Off | Power is not connected |
| 100/1000 | Green | The port is operating at the speed of 1000Mbps. |
|  | Orange | The port is operating at the speed of 100Mbps. |
|  | Off | No device attached or in 10Mbps mode |
| LNK/ACT | Green | The port is connecting with the device. |
|  | Blinking | The port is receiving or transmitting data. |
|  | Off | No device attached. |
| FDX/COL | Orange | The port is operating in Full-duplex mode. |
|  | Blinking | Packet collision occurred on this port. |
|  | Off | No device attached or in half-duplex mode. |

## Rear Panel

The rear panel of the 8-port Gigabit Switch consists of 8 auto-negotiation 10/100/1000Mbps Ethernet RJ-45 connectors (support Automatic

MDI/MDIX function).
■ RJ-45 Ports (Auto MDI/MDIX): 8 port auto-negotiation 10/100/1000 Mbps Ethernet RJ-45 connectors
[Auto MDI/MDIX means that you can connect to another Switch or workstation without changing non-crossover or crossover cabling.]


## Installation

This section shows the installation procedures of the switch.

Set the Switch on a sufficiently large flat space with a power outlet nearby. The surface where you put your Switch should be clean, smooth, level, and sturdy. Make sure there is enough clearance around the Switch to allow attachment of cables, power cord and air circulation.

## Attaching Rubber Feet

A. Make sure mounting surface on the bottom of the Switch is grease and dust free.
B. Remove adhesive backing from your Rubber Feet.
C. Apply the Rubber Feet to each corner on the bottom of the Switch. These footpads can prevent the Switch from shock/vibration.

## Mounting on the Wall

The switch can be mounted on the wall. The switch has two wallmount brackets included in the package.


## Power On

Connect the cord of power to the power socket on the rear panel of the Switch. The other side of power cord connects to the power outlet. Check the power indicator on the upper panel to see if power is properly supplied.

## Technical Specification

The following table provides the technical specification of 8-ports Gigabit Switch.

| Standard | IEEE 802.3 10BASE-T Ethernet <br> IEEE 802.3u 100BASE-TX Fast Ethernet <br> IEEE 802.3ab Gigabit Ethernet <br> IEEE 802.3x Flow Control and Back-pressure |
| :--- | :--- |
| Protocol | CSMA/CD |
| Technology | Store-and-Forward switching architecture |
| Transfer Rate | 14,880 pps for 10Mbps <br> $1,488,000$ pps for 1000Mbps |
| Connector | RJ-45; Auto-MDIX on all ports |
| MAC Address | 8K Mac address table <br> Memory Buffer |
| Jumbo frame | Supports 8Kbytes jumbo packet size |
| Back plane | $16 G b p s$ |


| Network Cable | 10BASE-T: 2-pair UTP/STP Cat. 3, 4, 5 cable EIA/TIA-568 100-ohm (100m) 100BASE-TX: 2-pair UTP/STP CAT. 5 cable EIA/TIA-568 100-ohm (100m) Gigabit Copper: 4 pair UTP/STP CAT. 5 cable EIA/TIA 568 100-ohm (100M) |
| :---: | :---: |
| LED | Per port: 100/1000, Link/Activity, Full duplex/ Collision <br> Per unit: Power |
| Power Supply | AC 100~240V, $50 / 60 \mathrm{~Hz}$ |
| Power <br> Consumption (DC) | 7.6 Watt (maximum) |
| Operation <br> Temperature | $0^{\circ} \mathrm{C}$ to $45^{\circ} \mathrm{C}\left(32^{\circ} \mathrm{F}\right.$ to $\left.113^{\circ} \mathrm{F}\right)$ |
| Operation <br> Humidity | 10\% to 90\% (Non-condensing) |
| Dimension | $165 \mathrm{~mm} \times 100 \mathrm{~mm} \times 32.5 \mathrm{~mm}(\mathrm{~L} \times \mathrm{W} \times \mathrm{H})$ |
| EMI | Compliance with FCC Class A, CE |
| Safety | Compliance UL, cUL, CE/EN60950 |

