FCC Statement

This device complies with FCC Rules Part 15. 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.

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 in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with manufacturer's 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 can be determined 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. Re-orient or relocate the receiving antenna.
2. Increase the separation between the equipment and receiver.
3. Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
4. Consult the dealer or an experienced radio/TV technician for help.

WARNING! Any changes or modifications to this product not expressly approved by the manufacturer could void any assurances of safety or performance and could result in violation of Part 15 of the FCC Rules.

CE Declaration of conformity

This equipment complies with the requirements relating to electromagnetic compatibility, EN 55022 class B for ITE and EN 50082-1. This meets. This meets the essential protection requirements of the European Council Directive 89/336/EEC on the approximation of the laws of the Member States relating to electromagnetic compatibility.

Trademarks

All company, brand, and product names are trademarks or registered trademarks of their respective companies.

Introduction

This user's guide applies to the Signamax 065-7012G 8-port 10/100/1000BaseT/TX Ethernet Switch. This switch is designed for easy installation and high performance in an environment where traffic on the network and the number of users increase continuously. Small businesses and corporate branch offices can now take full advantage of Gigabit Ethernet performance and preserve the existing desktop investment with no changes required to PCs, NICs, cabling, drivers, or PC configuration.

Features Overview

- Conforms to IEEE 802.3 10BaseT, IEEE 802.3u 100BaseTX, and IEEE 802.3ab Gigabit Ethernet standards
- Eight 10/100/1000 Mbps RJ-45 ports
- Supports store-and-forward mode switching
- Full and Half-Duplex mode operation
- IEEE802.3x flow control for Full-Duplex operation
- Back pressure for Half-Duplex flow control
- Auto-negotiation capability
- Source address learning and aging functions
- LEDs to indicate Link/Activity, 1000BaseT port speed, and Power Status
- Supports Auto-MDIX detection for easy and convenient uplink to switches and routers

Package Contents

- One 8-Port 10/100/1000BaseT/TX Ethernet Switch
- One External Power Adapter
- One User's Guide

Performance Highlights

- Provides Auto-MDIX function for easy and convenient uplink to switches and routers
- Store-and-forward switching scheme capability to support rate adaptation and ensures data integrity
- Auto-negotiation on each port.
- Auto-polarity detection for correction of incorrect polarity on the received twisted pair on each port
- Data forwarding rate 1.488,100 pps per port at 100% of wire-speed
- Short forwarding latency time

Hardware

The following describes the front panel, rear panel and LED indicators of the Signamax 065-7012G 8-port 10/100/1000BaseT/TX Ethernet Compact Gigabit Switch.

Front Panel

LED Indicators

LED	Color	Status	Description	Number of LED
Power	Green	On	Power on	1
Link/Act	Green	On	Link status of connected port	8
		Flashing	Data Transmission Status of connected port	
1000T	Green	On	Gigabit Ethernet transmission on that port	8

Rear Panel

1. RJ-45 Ports
   Eight Ethernet RJ-45 UTP ports all come with Auto-negotiation and operate at 10/100/1000 Mbps for connection to servers and hubs. All ports auto-detect Full/Half-Duplex mode
2. Auto-MDIX Function
   Any port can be used to connect to other switches or hubs without using a crossover cable.
3. Power Connector
   Used to connect the external DC power adapter that connects to the power outlet.

Network Connection

The following sections describe the connections of the Signamax 065-7012G 8-port 10/100/1000BaseT/TX Ethernet Switch.

PC to Switch

A PC can be connected to the Signamax 065-7012G Switch via a Category 5e or better UTP/STP straight cable for Gigabit Ethernet support. The PC (equipped with a RJ-45 10/100BaseT/TX 10/100 Mbps jack or a 10/100/1000BaseT/TX 10/100/1000 Mbps jack) should be connected to any of the eight ports.

Note: The LED indicators for PC connection are dependent on the LAN card capabilities. If LED indicators are not illuminated after making a proper connection, check the PC LAN card, the cable, the N-Way Switch conditions, and the connections.

Switch to Switch or Switch to Hub

Another switch or a hub (10BaseT or 100BaseTX) can be connected to the Signamax 065-7012G Switch via a Category 3/4/5 UTP/STP straight cable. The connection is accomplished from any normal port of the Signamax 065-7012G Switch to any port of the connected switch or hub.

Technical Specification

Standards:	IEEE802.3 10BaseT Ethernet, IEEE802.3u 100BaseTX Fast Ethernet, 1000BaseT Gigabit Ethernet, ANSI/IEEE std 802.3 N-Way auto-negotiation, IEEE802.3 Frame types: Transparent, IEEE802.Sx flow control for Full-Duplex, Back Pressure flow control for Half-Duplex, Auto-MDIX Function
Protocol:	CSMA/CD
Topology:	Star
Transmission Method:	Store-and-forward
Transfer Rate:	Ethernet: 10 Mbps (Half-Duplex); 20 Mbps (Full-Duplex) Fast Ethernet: 100 Mbps (Half-Duplex); 200 Mbps (Full-Duplex) Gigabit Ethernet: 1000 Mbps (Half-Duplex); 2000 Mbps (Full-Duplex)
Media:	10BaseT: 2-Pair UTP Cat. 3,4,5 (100m); EIA/TIA-568 100-ohm STP (100m) 100BaseTX: 2-Pair UTP Cat. 5 (100m); EIA/TIA-568 100-ohm STP (100m) 1000BaseT: 2-Pair UTP Cat. 5e or better (100m); EIA/TIA-568 100-ohm STP (100m)
No. of Ports:	Eight 10/100/1000 Mbps RJ-45 ports
MAC Address Table:	8K
Packet Filtering/Forwarding Rate:	Wire-speed per port (for 1000 Mbps, 100 Mbps, & 10 Mbps)
Power:	External Power Adapter 12V DC 0.6 A
Consumption:	3 watts maximum
Temperature:	Operating: 32°C ~ 113°F (0°C ~ 45°C), Storage: 5°F ~ 140°F (-10°C ~ 60°C)
Humidity:	Operating: 10% ~ 90%, Storage: 5% ~ 95%