

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 065-7007A 5-port and 065-7012A 8-port 10/100BaseT/TX Ethernet Mini Switches. These switches are 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 100Mbps Fast Ethernet performance and preserve existing desktop investment with no changes required to PCs, NICs, cabling, drivers, or PC configuration.

Features Overview

- Conforms to IEEE802.3 10BaseT and IEEE802.3u 100BaseTX standards
- Five/eight 10/100 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 FDX/Collision, Link/Activity, 100Base TX port speed, and Power Status
- Supports Auto-MDIX detection for easy and convenient uplink to switches and routers

Package Contents

- One 5/8-Port 10/100BaseT/TX Ethernet Mini 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 148,800 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 065-7007 5-port and 065-7012 8-port 10/100BaseT/TX Ethernet Mini Switches.

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 (model 065-7012)
		Flashing	Data Transmission Status of connected port	5 (model 065-7007)

Rear Panel

1. RJ-45 Ports
Five/eight Ethernet Mini RJ-45 UTP ports all come with Auto-negotiation and operate at 10/100 Mbps for connection to servers and hubs. All ports can be configured for 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 5V DC power adapter that connects to power outlet.

Network Connection

The following sections describe the connections of both the Signamax 065-7007 5-port and 065-7012 8-port 10/100BaseT/TX Ethernet Mini Switches.

PC to Switch

A PC can be connected to the Signamax Mini Switch via a two-pair Category 3/4/5 UTP/STP straight cable. The PC (equipped with a RJ-45 10/100BaseT/TX 10/100 Mbps jack) should be connected to any of the eight ports.

Note: The LED indicators for PC connection are dependant 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 Mini Switch conditions, and the connections.

Switch to Hub

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

Technical Specification

Standards:	IEEE802.3 10BaseT Ethernet, IEEE802.3u 100BaseTX Fast 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: 10Mbps (Half-Duplex); 20Mbps (Full-Duplex) Fast Ethernet: 100Mbps (Half-Duplex); 200Mbps (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)
No. of Ports:	Five/Eight 10/100 Mbps RJ-45 ports
RAM Buffer:	Total 128K bytes per device
Filtering Address Table:	1K
Packet Filtering/Forwarding Rate:	Wire-speed per port (for 100Mbps & 10Mbps)
Power:	External Power Adapter 5V DC 0.6 A
Consumption:	3 watts maximum
Temperature:	Operating: 32°C ~ 113°F (0°C ~ 45°C), Storage: 32°F ~ 140°F (0°C ~ 60°C)
Humidity:	Operating: 10% ~ 90%, Storage: 5% ~ 95%
Conformance:	FCC Class B, CE Mark Class B