

5 Port Industrial Ethernet Switch

IES5100

Instruction Manual



FCC Compliance Statement

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 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 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:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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Introduction

Thank you for purchasing the StarTech.com IES5100 5-Port Industrial Ethernet Switch. This 5 port (unmanaged) Industrial Ethernet Switch is designed to operate in harsh environments, making it an ideal solution for factory floors, warehouses, and outdoor locations without temperature control.

Features

- Device powers from the Terminal Block power connector
- Din-Rail mounting
- Store-and-forward mechanism
- Supports 10BaseT/100BaseTX and Full-Duplex/Half-Duplex Auto-negotiation function
- Supports 10/100BaseTX and Full-Duplex/Half-Duplex Auto-negotiation function
- Supports 2048 Mac addresses
- Supports IEEE802.3/802.3u/802.3X

Package Contents

- 1 x IES5100 5 Port Ethernet Switch
- 1 x Instruction Manual

Installation

DIN Rail Mounting

1. Lower the IES5100 onto the DIN Rail from above using the free slot.
2. Push the front of the switch onto the mount until a click is heard.

Connecting to Power

1. Connect the DC power cord to the terminal block connector on the rear of the IES5100. Connect the power cord to a standard wall outlet.

Network Connection

1. Ensure that both the IES5100 and any devices that are to be connected to it are powered off.
2. Prepare the necessary cabling for each device that is to be attached to the IES5100. Use the following chart as reference for cabling types:

Speed	Connector	Port Speed- Half/Full Duplex	Cable	Max. Distance
10Base-T	RJ-45	10/20 Mbps	2-pair UTP/ STP Cat. 3, 4, 5	100 m
100Base-TX	RJ-45	100/200 Mbps	2-pair UTP/STP Cat. 5	100 m
100Base-FX	SC, ST	100/200 Mbps	MMF (50 or 62.5µm)	2 km
100Base-FX	SC, ST	100/200 Mbps	SMF (9 or 10µm)	15, 40, or 75 km

3. Connect the cable to both the IES5100 and attached devices and turn them on.
4. Check to ensure that both devices are transmitting and receiving data by checking their LED displays. (See next section for details)

LED Displays

The IES5100 has LED indicators for each of the ports on the switch to show information on network connections.

LED	State	Indication
LNK/ACT	Steady	Valid network connection established
	Flashing	Transmitting or receiving data
100	Steady	Port is transferring at 100Mbps
	Off	Port is transferring at 10Mbps or is not transferring

Specifications

Applicable Standards	IEEE 802.3 10Base-T IEEE 802.3u 100Base-TX/FX
Switching Method	Store-and-Forward
Forwarding Rate 10Base-T: 100Base-TX/FX:	10 / 20Mbps half / full-duplex 100 / 200Mbps half / full-duplex
Performance	148,80pps for 10Mbps 148,810pps for 100Mbps
Cable 10Base-T: 100Base-TX: 100Base-FX:	2-pair UTP/STP Cat. 3, 4, 5 2-pair UTP/STP Cat. 5 Up to 100m (328ft) MMF (50 or 62.5µm), SMF (9 or 10µm)
LED Indicators	Per unit – Power status (PWR) Per port – 10/100TX or 100FX - LNK/ACT (Green), 100 (Yellow)
Dimensions	26mm (W) × 70mm (D) × 110mm (H) (1.02" (W) × 2.76" (D) × 4.33" (H))
Net Weight	0.2Kg (0.44lb.)
Power	Terminal Block: 12-48VDC
Power Consumption	2.4W Max.

Operating Voltage & Max. Current Use	0.2A @ 12VDC, 0.1A @ 24VDC, 0.05A @ 48VDC
Operating Temperature	-10° C to 60° C (14° F to 140 ° F)
Storage Temperature	-25° C to 85° C (-13 °F to 185 °F)
Humidity	5%-95% non-condensing
Safety	UL60950-1, EN60950-1, IEC60950-1
EMI	FCC Part 15, Class A EN61000-6-3: EN55022, EN61000-3-2, EN61000-3-3
EMS	EN61000-6-2: EN61000-4-2 (ESD Standard) EN61000-4-3 (Radiated RFI Standards) EN61000-4-4 (Burst Standards) EN61000-4-5 (Surge Standards) EN61000-4-6 (Induced RFI Standards) EN61000-4-8 (Magnetic Field Standards) EN61000-4-11 (Voltage Dips Standards)
Environmental Test Compliance	IEC60068-2-6 Fc (Vibration Resistance) IEC60068-2-27 Ea (Shock) IEC60068-2-32 Ed (Free Fall)

Technical Support

StarTech.com's lifetime technical support is an integral part of our commitment to provide industry-leading solutions. If you ever need help with your product, visit www.startech.com/support and access our comprehensive selection of online tools, documentation, and downloads.

Warranty Information

This product is backed by a one year warranty.

In addition, StarTech.com warrants its products against defects in materials and workmanship for the periods noted, following the initial date of purchase. During this period, the products may be returned for repair, or replacement with equivalent products at our discretion. The warranty covers parts and labor costs only. StarTech.com does not warrant its products from defects or damages arising from misuse, abuse, alteration, or normal wear and tear.

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