





# **IES-1071**

# 8 FE + 2 GE SFP Managed Switch -10 to 60C, DIN-rail

#### **Overview**

LevelOne IES-1071 Industry Ethernet Switch provides 8 ports of 10/100Base-TX plus 2 ports of 1000Base SFP slots to enable high speed network at mission-critical environment. This device is designed to be mounted on an industry standard DIN-rail, plus the clearly visible status LEDs provide simple monitoring of port link activity. Moreover, the SFP slots support pluggable modules that enabling you to choose from a variety of transceivers.

# **Resilient Ring Network**

Supports Ring topology network providing simple installation and ultra fast network recovery performance, less than 15ms. Unlike much complex resilient topology, such as a redundant star, the Ring simplifies the network design and requires less cabling installation. In addition, fast network recovery time helps minimize system downtime.

## **Cost Effective**

This device operates under -10 to 60 Celsius (-14 to 140 Fahrenheit) temperature that offers optimal suitability for industrial applications at low cost while maintaining all components built to withstand harsh environment applications without compromise reliability and stability.

## Management

IES-1071 supports a variety of management features including: CLI via Console or Telnet; Graphic User Interface via Web Browser or Simple Network Management Protocol via SNMP tools. It provides better visibility and management of those critical assets.

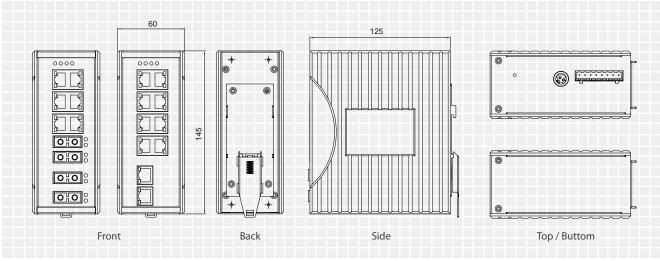
#### **Features**

- Supports α-ring and RSTP/MSTP/STP for Ethernet redundancy
- IP Multicast Filtering through IGMP Snooping V1, V2 & V3
- Supports port-based VLAN and IEEE802.1Q VLAN Tagging and GVRP
- IEEE802.1p QoS with four priority queues
- MAC-based trunking and LACP
- IEEE802.1x Security
- Bandwidth Rate Control
- Per-port programmable MAC address locking
- Up to 24 Static Secure MAC addresses per port

- Port mirroring
- NTP synchronization
- DHCP Client/Server
- RS-232 console, Telnet, SNMP V1, V2c & V3, RMON, Web Browser, and TFTP Management
- 1000Mbps-Full-duplex, 10/100Mbps-Full/Half-duplex, Auto-Negotiation, Auto-MDI/MDIX
- Full wire-speed forwarding rate
- -10°C to 60°C (14°F to 140°F) and is tested for functional operation @ -20°C to 70°C (-4°F to 158°F)

### **Diagrams**

Unit: mm



# **Specifications**

Technology	
Standards	■ IEEE802.3 10BASE-T, IEEE802.3u 100BASE-TX/100BASE-FX, IEEE802.3ab 1000BASE-T, IEEE802.3z 1000BASE-SX/1000BASE-LX, IEEE802.3x, IEEE802.1p, IEEE802.1Q, IEEE802.1w, IEEE802.1x, IEEE802.3ad
Forward and Filtering Rate	<ul><li>14,880pps for 10Mbps</li><li>148,810pps for 100Mbps</li><li>1,488,100pps for 1000Mbps</li></ul>
Packet Buffer Memory	= 2M bits
Processing Type	<ul> <li>Store-and-Forward</li> <li>Half-duplex back-pressure and IEEE802.3x full-duplex flow control</li> </ul>
Address Table Size	■ 8192 MAC addresses

Power	
nput	■ Input Voltage: 12 to 48VDC (Terminal Block); 12VDC (DC Jack)
Power Consumption	■ 11W Max. 0.92A @ 12VDC, 0.46A @ 24VDC
Overload Current Protection	■ Present
everse olarity rotection	■ Present

Mechanical	I
Casing	Metal case
	■ IP30
Dimensions	■ 60mm (W) x 125mm (D) x 145mm (H)
	(2.36" (W) x 4.92" (D) x 5.7" (H))
Weight	■ 1.1Kg (2.42lbs.)
Installation	■ DIN-Rail (Top hat type35mm), Rack Mount, Wall Mount
Interface	
Ethernet Port	■ 10/100BASE-TX: 8, 6 or 4 ports
	■ 100BASE-FX: 0 to 4 ports
	Gigabit: 0, 1 or 2 ports
Console Port	Port: One DB9 RS-232 port
LED Indicators	Per Unit: Power Status (Power 1, Power 2, Power 3)
	Per Port: 10/100TX, 100FX/ SFP: Link/Activity, Speed
	10/100/1000TX, 1000SX/LX/ SFP: Link/Activity,
	Speed
Alarm Contact	one relay output with current 1A @ 24VDC

Environment	
Operating Temperature	-10°C to 60°C (14°F to 140°F)
	Tested @ -20°C to 70°C( -4°F to 158°F)
Storage Temperature	-40°C to 85°C (-40°F to 185°F)
Ambient Relative Humidity	■ 5% to 95% (non-condensing)
MTBF	■ 225.27 years

Regulatory Ap	ſ
ISO	Manufactured in an ISO9001 facility
EMI	FCC Part 15, Class A
	■ EN61000-6-4
	- EN55022
	- EN61000-3-2
	- EN61000-3-3
EMS	■ EN61000-6-2
	- EN61000-4-2 (ESD Standards)
	Contact: + / - 6KV
	Air: + / - 8KV
	- EN61000-4-3 (Radiated RFI Standards)
	10V/m, 80 to 1000MHz; 80% AM
	- EN61000-4-4 (Burst Standards)
	Signal Ports: + / - 4KV
	D.C. Power Ports: + / - 4KV
	- EN61000-4-5 (Surge Standards)
	Signal Ports: + / - 2KV; Line-to-Earth
	D.C. Power Ports: + / - 2KV; Line-to-Earth
	- EN61000-4-6 (Induced RFI Standards)
	Signal Ports: 10Vrms @ 0.15 - 80MHz; 80% AM
	D.C. Power Ports: 10Vrms @ 0.15 - 80MHz; 80% AM
	- EN61000-4-8 (Magnetic Field Standards)
	30A/m @ 50, 60Hz
Environmental	■ IEC60068-2-6 Fc (Vibration Resistance)
Test Compliance	5g @ 10 - 150Hz, Amplitude 0.35mm
	(Operation/Storage/Transport)
	■ IEC60068-2-27 Ea (Shock)
	25g @ 11ms (Half-Sine Shock Pulse; Operation)
	50g @ 11ms (Half-Sine Shock Pulse; Storage/Transport)
	■ IEC60068-2-32 Ed (Free Fall)
	1M (3.281ft.)

## **Order Information**

**IES-1071** - 8 FE + 2 GE SFP Managed Switch -10 to 60C, DIN-rail

# **Package Contents**

IES-1071 CD Manual / Utility Quick Installation Guide

# **Optional Accessories**

SFP-4200 - 1.25G MMF SFP Transceiver (550m, 850nm, -20 to 85C)
SFP-4210 - 1.25G SMF SFP Transceiver (10km, 1310nm, -40 to 85C)
SFP-4240 - 1.25G SMF SFP Transceiver (40km, 1310nm, -40 to 85C)
SFP-4270 - 1.25G SMF SFP Transceiver (70km, 1550nm, -40 to 85C)
SFP-4310 - 1.25G BIDI SMF SFP Transceiver (10km, 1310nm, -40 to 85C)
SFP-4320 - 1.25G BIDI SMF SFP Transceiver (10km, 1550nm, -40 to 85C)

SFP-4330 - 1.25G BIDI SMF SFP Transceiver (20km, 1310nm, -40 to 85C) SFP-4340 - 1.25G BIDI SMF SFP Transceiver (20km, 1550nm, -40 to 85C) SFP-4350 - 1.25G BIDI SMF SFP Transceiver (40km, 1310nm, -40 to 85C) SFP-4360 - 1.25G BIDI SMF SFP Transceiver (40km, 1550nm, -40 to 85C) SFP-4370 - 1.25G BIDI SMF SFP Transceiver (60km, 1310nm, -40 to 85C) SFP-4380 - 1.25G BIDI SMF SFP Transceiver (60km, 1550nm, -40 to 85C)