





# **IES-0883**

# 6 GE + 2 SFP Managed Switch -20 to 60C, DIN-rail

#### **Overview**

LevelOne IES-0883 Industry Ethernet Switch provides 8 ports of Gigabit Ethernet plus 2 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 -20 to 60 Celsius (-4 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-0883 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.

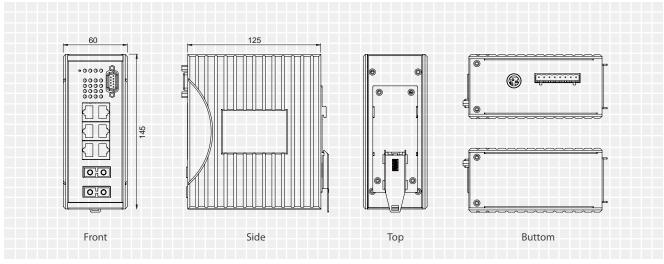
#### **Features**

- 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 with automatic link failover
- RS-232 console, Telnet, SNMP V1, V2c & V3, RMON, Web Browser, and TFTP Management
- Supports Command Line Interface in RS-232 Console
- Supports 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
- 1000Mbps-Full-duplex, 10/100Mbps-Full/Half-duplex, Auto-Negotiation, Auto-MDI/MDIX
- Full wire-speed forwarding rate
- -20°C to 60°C (-4°F to 140°F) and is tested for functional operation @ -30°C to 70°C (-22°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, IEEE802.1Q, IEEE802.1p, IEEE802.1s, IEEE802.1w, IEEE802.1D
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	= 1M bits
Processing Type	Store-and-Forward     Half-duplex back-pressure and IEEE802.3x full-duplex flow control
Address Table Size	■ 4096 MAC addresses

Power	
Input	■ Input Voltage: 12 to 32VDC (Terminal Block); 12VDC (DC Jack)
Power Consumption	■ 22W Max. 1.83A @ 12VDC, 0.92A @ 24VDC
Overload Current Protection	■ Present
Reverse Polarity Protection	■ Present

Mechanical	
Casing	■ Aluminum case ■ IP30
Dimensions	■ 60mm (W) x 125mm (D) x 145mm (H) (2.36" (W) x 4.92" (D) x 5.71" (H))
Weight	■1.1Kg (2.42lbs.)
Installation	■ DIN-Rail (Top hat type 35mm), Wall Mount
Interface	'
Ethernet Port	■ 10/100/1000BASE-TX: 8, 7, or 6 ports ■ 1000BASE-SX/LX: 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), Reset, Alarm Per Port: Link/Activity, Speed
Alarm Contact	One relay output with current 1A @ 24VDC

Environment	
Operating Temperature	■ -20°C to 60°C (-4°F to 140°F) Tested @ -30°C to 70°C( -22°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	■ 53.14 years

Regulatory A	Approvals
ISO	Manufactured in an ISO9001 facility
Safety	■ UL508
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: + / - 1KV; Line-to-Line  D.C. Power Ports: + / - 0.5KV; 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 Test Compliance	<ul> <li>IEC60068-2-6 Fc (Vibration Resistance)</li> <li>5g @ 10 - 150Hz, Amplitude 0.35mm</li> <li>(Operation/Storage/Transport)</li> <li>IEC60068-2-27 Ea (Shock)</li> <li>25g @ 11ms (Half-Sine Shock Pulse; Operation)</li> <li>50g @ 11ms (Half-Sine Shock Pulse; Storage/Transport)</li> <li>IEC60068-2-32 Ed (Free Fall)</li> <li>1M (3.281ft.)</li> </ul>

## **Order Information**

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# **Package Contents**

IES-0883 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)