



# **IES-1070** 8 FE + 2 GE TX Managed Switch -10 to 60C, DIN-rail

#### **Overview**

LevelOne IES-1070 Industry Ethernet Switch provides 8 ports of 10/100Base-TX plus 2 ports of 10/100/1000Base Gigabit Ethernet 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.

#### **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

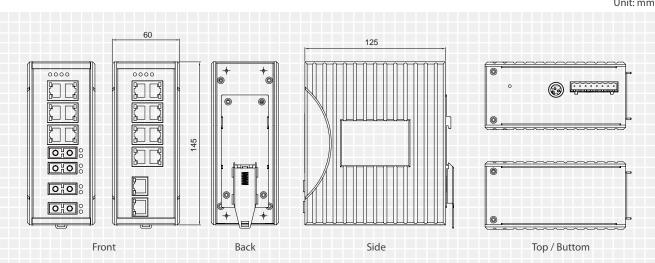
IES-1070 supports a variety of management features including: CLI via Console or Telnet; Graphic User Interface via Web Browser or Simple Network Management Protocol via SNMP tools. It provides better visibility and management of those critical assets.

#### 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		Environment	
Standards	IEEE802.3 10BASE-T, IEEE802.3u 100BASE-	Operating	-10°C to 60°C (14°F to 140°F)
	TX/100BASE-FX, IEEE802.3ab 1000BASE-T,	Temperature	Tested @ -20°C to 70°C( -4°F to 158°F)
	IEEE802.3z 1000BASE-SX/1000BASE-LX, IEEE802.3x, IEEE802.1p, IEEE802.1Q, IEEE802.1w, IEEE802.1x	Storage Temperature	■ -40°C to 85°C (-40°F to 185°F)
Forward and Filtering Rate	<ul><li>14,880pps for 10Mbps</li><li>148,810pps for 100Mbps</li></ul>	Ambient Relative Humidity	5% to 95% (non-condensing)
	1,488,100pps for 1000Mbps	MTBF	46.55 years
Packet Buffer Memory	2M bits		
Processing Store-and-Forward		Regulatory Approvals	
Туре	<ul> <li>Half-duplex back-pressure and IEEE802.3x full-duplex flow control</li> </ul>	ISO	Manufactured in an ISO9001 facility
Address Table	8192 MAC addresses	EMI	FCC Part 15, Class A
Size			EN61000-6-4
			- EN55022
Power			- EN61000-3-2
Input	Input Voltage: 12 to 48VDC (Terminal Block);		- EN61000-3-3
	12VDC (DC Jack)	EMS	<ul> <li>EN61000-6-2</li> <li>EN61000-4-2 (ESD Standards)</li> </ul>
Power	11W Max. 0.92A @ 12VDC, 0.46A @ 24VDC		
Consumption			Contact: + / - 6KV
Overload	Present		Air: + / - 8KV
Current Protection			- EN61000-4-3 (Radiated RFI Standards)
	Present		10V/m, 80 to 1000MHz; 80% AM
Reverse Polarity Protection	Present		- EN61000-4-4 (Burst Standards)
			Signal Ports: + / - 4KV
			D.C. Power Ports: + / - 4KV
Mechanical			- EN61000-4-5 (Surge Standards)
Casing	Metal case		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)
0	■ 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			30A/m @ 50, 60Hz
Ethernet Port	■ 10/100BASE-TX: 8, 6 or 4 ports	Environmental	<ul> <li>IEC60068-2-6 Fc (Vibration Resistance)</li> </ul>
	100BASE-FX: 0 to 4 ports	Test Compliance	5g @ 10 - 150Hz, Amplitude 0.35mm
	Gigabit: 0, 1 or 2 ports		<ul> <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> </ul>
Console Port	Port: One DB9 RS-232 port		
LED Indicators	<ul> <li>Per Unit: Power Status (Power 1, Power 2, Power 3)</li> <li>Per Port: 10/100TX, 100FX/ SFP: Link/Activity, Speed</li> </ul>		
	10/100/1000TX, 1000SX/LX/ SFP: Link/Activity, Speed		IEC60068-2-32 Ed (Free Fall)

## **Order Information**

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### Package Contents IES-1070

IES-1070 CD Manual / Utility Quick Installation Guide