IES-1084

8 x 802.3af/at + 2 GE TX Managed Switch -40 to 75C, DIN-rail

Overview

LevelOne IES-1084 Industry Ethernet Switch provides 8 802.3af/at PoE 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.

High Reliability

All components are built to withstand harsh environment applications without compromise where humidity, temperature variation and even shock vibration are concerns, including Electric & Utility, Critical Infrastructure, Transportation and Surveillance Security. This device operates under -40 to 75 Celsius (-40 to 167 Fahrenheit) temperature.

Management

IES-1084 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.

Power over Ethernet

This switch is Power Sourcing Equipment (PSE), and it is fully complied with IEEE 802.3af & 802.3at PoE standard at maximum 15.4W / 30W power budget per port. It helps to save infrastructure wiring costs dramatically by eliminating electric wiring and less UPS needed.

Safety

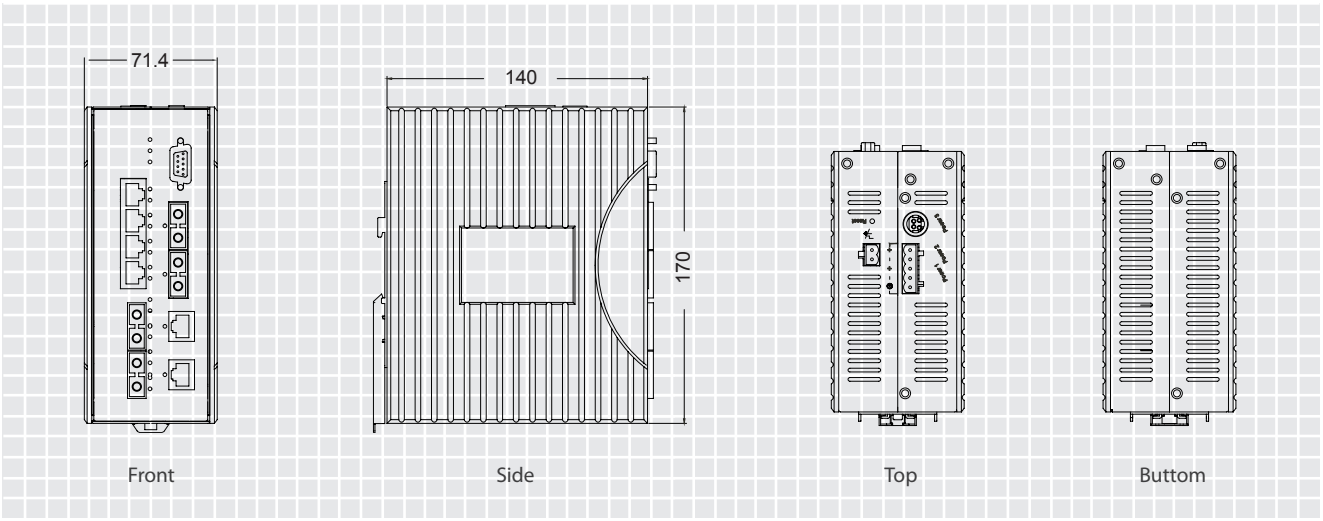
This device has been tested under UL508 standard for Industrial Control Equipment to endurance under test turn on and off 6,000 times while loaded, with no single failure. It's highly reliability and safety measurement to ensure field hardened, especially for the harsh environment.

Features

- Supports PoE Power Sourcing Equipment (PSE)
- PoE control and scheduling
- 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 fail-over
- 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
- -40°C to 75°C (-40°F to 167°F) operating temperature range, tested for functional operation @ -40°C to 85°C (-40°F to 185°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,IEEE802.3af
Forward and Filtering Rate	▪ 14,880pps for 10Mbps ▪ 148,810pps for 100Mbps ▪ 1,488,100pps for 1000Mbps
Packet Buffer Memory	▪ 2M bits
Processing Type	▪ Store-and-Forward ▪ Half-duplex back-pressure and IEEE802.3x full-duplex flow control
Address Table Size	▪ 8192 MAC addresses

Power	
Power Input	▪ Redundant power inputs: Terminal Block: 47 - 57VDC DC Jack: 47 - 57VDC
Power Consumption	▪ Device: Max. 15W (without PoE) ▪ PoE power budget (depends on power input): 181.6W Max.
PoE Power Output	▪ Port 1 to 8 ▪ IEEE802.3af: up to 15.4W/port, 47 - 57VDC. ▪ IEEE802.3at: up to 30W/port, 50 - 57VDC
▪ Supports overload current protection ▪ Supports reverse polarity protection	

Mechanical	
Casing	▪ Metal case ▪ IP30
Dimensions	▪ 65mm (W) x 145mm (D) x 165mm (H) (2.56" (W) x 5.71" (D) x 6.5" (H))
Weight	▪ 1Kg (2.2lbs.)
Installation	▪ Din-Rail (Top hat type35mm), Wall Mount
Interface	
Ethernet Port	▪ 10/100BASE-TX (PoE): 8 or 4 ports ▪ 100BASE-FX: 0, 2 or 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: PoE (Amber) for 10/100TX, 10/100TX, 100FX: Link/Activity (Green), Gigabit: Link/Activity (Green)

Environment	
Operating Temperature	▪ -40°C to 75°C (-40°F to 167°F) Tested @ -40°C to 85°C (-40°F to 185°F)
Storage Temperature	▪ -40°C to 85°C (-40°F to 185°F)
Ambient Relative Humidity	▪ 5% to 95% (non-condensing)
MTBF	▪ 37.49 years

Regulatory 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; Criteria B Air: + / - 8KV; Criteria B - EN61000-4-3 (Radiated RFI Standards) 10V/m, 80 to 1000MHz; 80% AM Criteria A - EN61000-4-4 (Burst Standards) Signal Ports: + / - 4KV; Criteria B D.C. Power Ports: + / - 4KV; Criteria B - EN61000-4-5 (Surge Standards) Signal Ports: + / - 1KV; Line-to-Line; Criteria B D.C. Power Ports: + / - 0.5KV; Line-to-Earth; Criteria B - EN61000-4-6 (Induced RFI Standards) Signal Ports: 10Vrms @ 0.15 - 80MHz; 80% AM Criteria A D.C. Power Ports: 10Vrms @ 0.15 - 80MHz; 80% AM Criteria A - EN61000-4-8 (Magnetic Field Standards) 30A/m @ 50, 60Hz; Criteria A
Environmental Test Compliance	▪ IEC60068-2-6 Fc (Vibration Resistance) 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-1084 - 8 x 802.3af/at + 2 GE TX Managed Switch -40 to 75C, DIN-rail

Package Contents

IES-1084
CD Manual / Utility
Quick Installation Guide