IES-0842

4 x 802.3at + 4 FE Web Smart Switch -10 to 60C, DIN-rail

Overview

LevelOne IES-0842 Industry Ethernet Switch provides 4 PoE ports of 10/100Base-TX plus 4 ports of 10/100Base-TX 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.

Redundancy

This redundant power system is designed to meet the challenge of power failure to ensure reliability and constant availability. Single power design works fine in non-critical network applications, but it falls short drastically for network applications in transportation, automate production or banking.

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.

Web Management

Web-based GUI management features implementation of Port-based VLAN, IEEE802.1p QoS, Prioritised DSCP, set up Admin Password with ease. Plus, the Power over Ethernet ports can be On / Off and limits the power budget remotely.

Power over Ethernet

This switch is Power Sourcing Equipment (PSE), and it is fully complied with IEEE 802.3at PoE standard at maximum 30W power budget per port. It helps to save infrastructure wiring costs dramatically by eliminating electric wiring and less UPS needed. Also, it is compatible with IEEE802.3af standard PD devices.

Safety

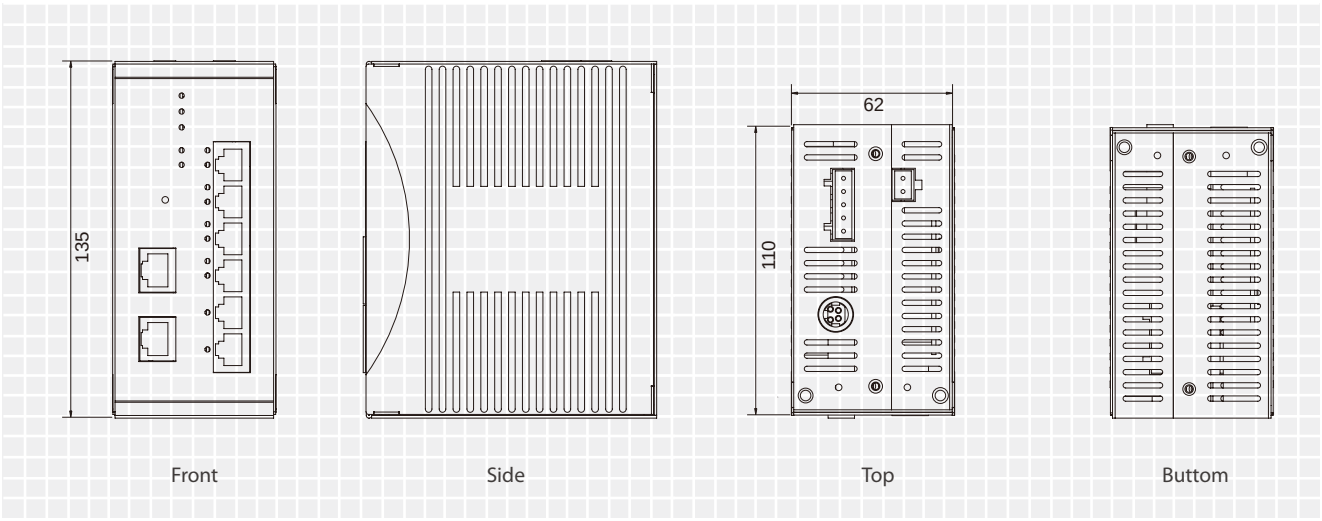
This device has been tested under UL508 standard for Industrial Control Equipment to endurance under test turn on and off 6,000 times while loaded, with no single failure. It's highly reliability and safety measurement to ensure field hardened, especially for the harsh environment.

Features

- Provides flexibility of 8 Ethernet ports that configure in combinations of copper and fiber optic interfaces
- -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)
- Port 1 - 4 support IEEE802.3at Power over Ethernet Plus (PoE+) Power Sourcing Equipment (PSE)
- PoE ports can support the IEEE 802.3at standard and power up 30W devices
- Provides DIN-rail, panel or Rack mounting
- System, IP Configuration, Port-based VLAN and QoS Priority setting through the Web browser Interface
- PoE (Power budget Control, PoE status, Port status) through the Web browser Interface
- Complies with IEC61000-6-2 EMC Generic standard immunity for Industrial environment
- Complies with NEMA TS2 Environmental requirements for Traffic control equipment
- Alarms for power and port link failure by relay output
- Redundant power inputs with Terminal Block and DC Jack

Diagrams

Unit: mm



Specifications

Technology	
Standards	▪ IEEE802.3 10BASE-T, IEEE802.3u 100BASE-TX/FX, ▪ IEEE802.3x, IEEE802.3af
Forward and Filtering Rate	▪ 14,880pps for 10Mbps ▪ 148,810pps for 100Mbps
Packet Buffer Memory	▪ 1M bits
Processing Type	▪ Store-and-Forward ▪ Half-duplex back-pressure and IEEE802.3x full-duplex flow control
Address Table Size	▪ 1024 MAC addresses

Power	
Power Input	▪ Redundant power inputs: Terminal Block: 47 - 57VDC DC Jack: 47 - 57VDC
Power Consumption	▪ Device: Max. 10W (without PoE) ▪ PoE power budget (depends on power input): 120W Max.
PoE Power Output	▪ Port 1 to 4 ▪ IEEE802.3af: up to 15.4W/port, 47 - 57VDC, 600mA Max

▪ Supports overload current protection

▪ Supports reverse polarity protection

Mechanical	
Casing	▪ Metal case ▪ IP30
Dimensions	▪ 62mm (W) x 110mm (D) x 135mm (H) (2.44" (W) x 4.33" (D) x 5.31" (H))
Weight	▪ 1Kg (2.2lbs.)
Installation	▪ DIN-Rail (Top hat type 35mm), Panel, Rack Mounting

Interface	
Ethernet Port	▪ 10/100BASE-TX: 8, 7 or 6 ports ▪ 100BASE-FX: 0, 1 or 2 ports
LED Indicators	▪ Per Unit: Power Status (Power 1, Power 2, Power 3) ▪ Per Port: 10/100TX, 100FX: Link/Activity (Green) PoE: Link (Amber)
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	▪ 26.19 years

Regulatory Approvals	
ISO	▪ Manufactured in an ISO9001 facility
Safety	▪ UL508 (Pending)
EMI	▪ FCC Part 15, Class A ▪ EN61000-6-3 - EN55022 - EN61000-3-2 - EN61000-3-3
EMS	▪ EN61000-6-2 - EN61000-4-2 (ESD Standards) Contact: + / - 4KV; Criteria B Air: + / - 8KV; Criteria B - EN61000-4-3 (Radiated RFI Standards) 10V/m, 80 to 1000MHz; 80% AM Criteria A 3V/m, 1400 to 2000MHz; 80% AM Criteria A 1V/m, 2000 to 2700MHz; 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

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Package Contents

IES-0842
CD Manual / Utility
Quick Installation Guide