IES-0512
4 x 802.3af + 1 MM SC Unmanaged Switch
-10 to 60C, Desktop

Overview
LevelOne IES-0512 Industry Ethernet Switch provides 4 PoE ports of 10/100Base-TX plus 1 port 100FX Multimode SC fiber 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.

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.

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

Compact & Fanless
The housing is designed with small footprint, it can be installed on the desktop or wall mount, and ideally suited for the limited available space; It is also leveraging a reliable fanless and durable housing which is more efficient and immune to dust.

Plug & Play
This unmanaged Industrial Ethernet Switch is designed for the demanding industrial environments at businesses in need of instant connectivity with no setup or configure required, truly plug and play.
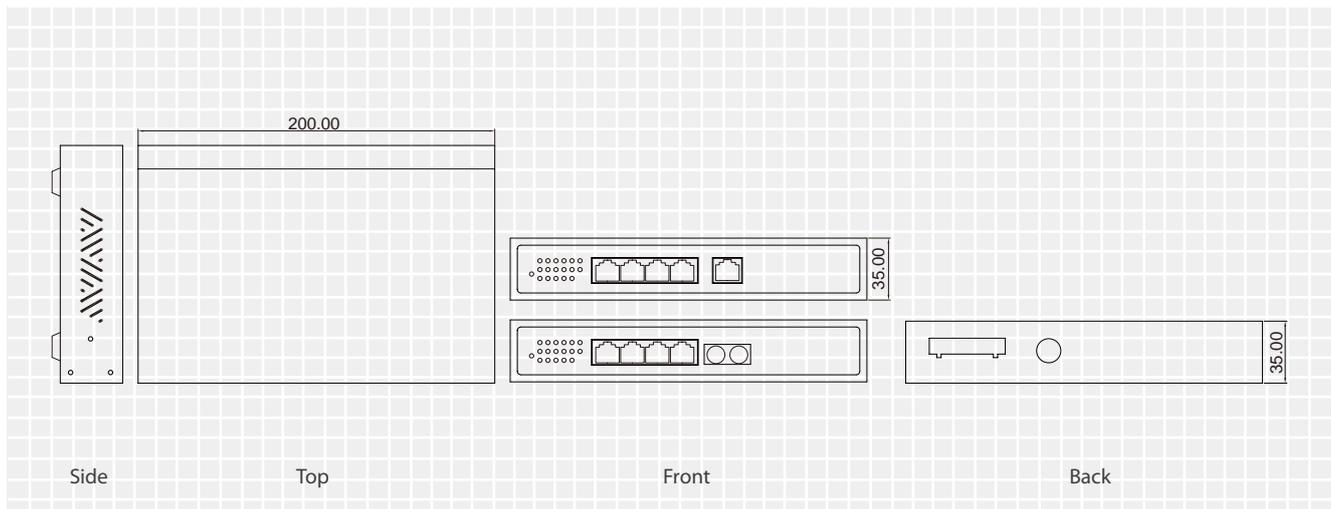
Safety
This device has been tested under UL508 standard for Industrial Control Equipment to endurance under test turn on and off 6,000 times while loaded, with no single failure; also with NEMA (National Manufacturers Association) TS2 Environmental certified for the Traffic Control Equipment that withstand extreme temperatures, operating voltage and humidity fluctuation, vibration and shock commonly experienced in severe outdoor environments.

Features

- Provides flexibility of 5 Ethernet ports that configure in combinations of copper and fiber optic interfaces
- -10℃ to 60℃ (14°F to 140°F) and is tested for functional operation @ -20℃ to 70℃ (-4°F to 158°F)
- Port1 - 4 supports IEEE802.3af Power over Ethernet (PoE) Power Sourcing Equipment (PSE)

- Provides wall and desktop mounting
- 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

200.00

35.00

35.00

Side   Top   Front   Back

Specifications

Technology

Standards	• IEEE802.3 10BASE-TX, IEEE802.3u 100BASE-TX/FX, IEEE802.3x, IEEE802.3af
Forward and Filtering Rate	• 14,880pps for 10Mbps • 148,810pps for 100Mbps
Packet Buffer Memory	• 512K 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 - 55VDC DC Jack: 47 - 55VDC
Power Consumption	• Device: Max. 10W (without PoE) • PoE power budget (depends on power input): 61.6W Max.
PoE Power Output	• Port 1 to 4 • IEEE802.3af: up to 15.4W/port, 47 - 55VDC, 350mA Max
	• Supports overload current protection
	• Supports reverse polarity protection

Mechanical

Casing	• Aluminum case • IP30
Dimensions	• 200mm (W) x 134.3mm (D) x 35mm (H) (7.87" (W) x 5.29" (D) x 1.38" (H))
Weight	• 0.8Kg (1.76lbs.)
Installation	• Wall, Desktop Mounting

Interface

Ethernet Port	• 10/100BASE-TX: 5 or 4 ports • 100BASE-FX: 0 or 1 ports
LED Indicators	• Per Unit: Power Status: Power 1, 2, 3 (Green), Fault (Red) • Per Port: 10/100TX, 100FX: Link/Activity (Green)
Alarm Contact	• One relay output with current 1A @ 250VAC

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	• 36.34 years

Regulatory Approvals

ISO	• Manufactured in an ISO9001 facility
Safety	• UL508 (Pending)

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
	    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

IES-0512 – 4 x 802.3af + 1 MM SC Unmanaged Switch -10 to 60C, Desktop

Package Contents

IES-0512
Quick Installation Guide