IES-0823
6 GE + 2 SFP Unmanaged Switch -20 to 60C, DIN-rail

Overview

LevelOne IES-0823 Industry Ethernet Switch provides 6 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.

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.

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.

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.

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.
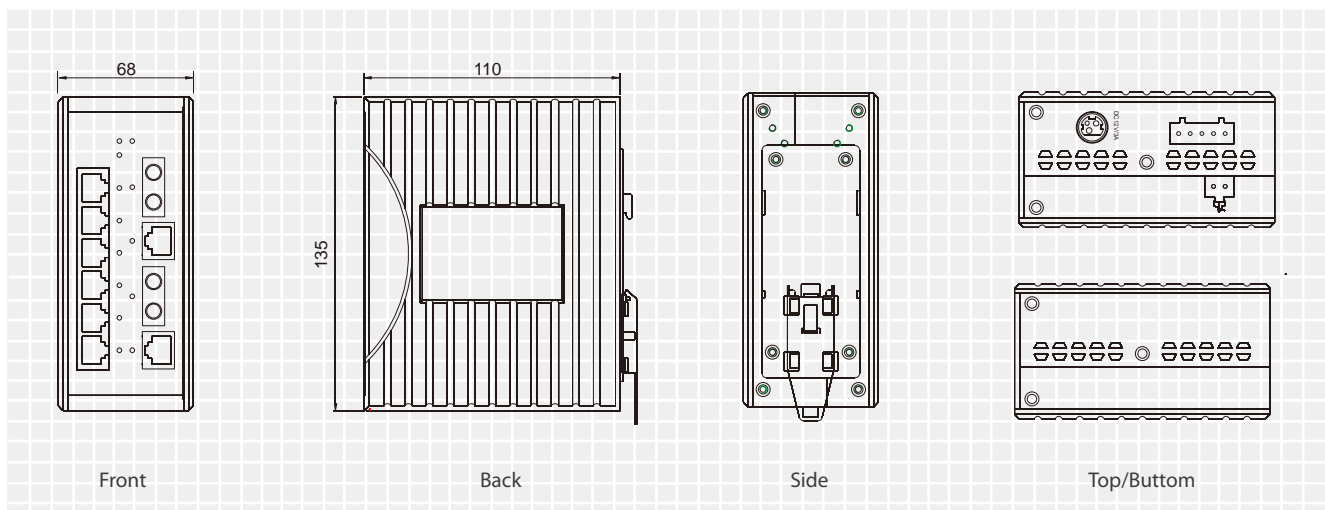
Reliability

Rugged IP30 rated aluminium housing is designed for industrial applications. With protection against ingress of dirt and solid metal housing to ensure a long-last operating life under harsh environments

Features

- Provides 6 10/100/1000Base-T ports and 2 SFP ports
- Gigabit combo port can choose to use either 1000BASE-SX/LX/SFP interface or 10/100/1000BASE-TX interface
- Supports 1000Mbps-Full-duplex, 10/100Mbps-Full/Half-duplex, Auto-Negotiation, Auto-MDI/MDIX
- Supports jumbo frame up to 9KB

- Redundant power inputs (12 - 32VDC) with Terminal Block and DC Jack (12VDC)
- Alarms for power failure by relay output
- -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).
- Provides DIN-rail or panel mounting
- Complies with IEC61000-6-2 EMC Generic standard immunity for Industrial environment

Diagrams

Unit: mm

Front   Back   Side   Top/Buttom

Specifications

Technology

Standards	• IEEE802.3 10BASE-T, 802.3u 100BASE -TX/FX, 802.3ab 1000BASE-T, 802.3z 1000BASE-SX/LX, IEEE802.3x
Forward and Filtering Rate	• 14,880pps for 10Mbps • 148,810pps for 100Mbps • 1,488,100pps for 1000Mbps
Packet Buffer Memory	• 1.125M bits
Processing Type	• Store-and-Forward • Half-duplex back-pressure and IEEE802.3x full-duplex flow control
Address Table Size	• 8192 MAC addresses

Power

Input	• Input Voltage: 12 to 32VDC (Terminal Block); 12VDC (DC Jack)
Power Consumption	• 6.7W Max. 0.52A @ 12VDC, 0.26A @ 24VDC
Overload Current Protection	• Present
Reverse Polarity Protection	• Present

Mechanical

Casing	• Aluminum case • IP30
Dimensions	• 68mm (W) x 110mm (D) x 135mm (H) (2.68" (W) x 4.33" (D) x 5.31" (H))
Weight	• 0.8Kg (1.761lbs.)
Installation	• DIN-Rail (Top hat type 35mm), Panel Mounting

Interface

Ethernet Port	• Gigabit: 8 ports (2 Fiber combo ports included)
LED Indicators	• Per Unit: Power Status (Power 1, Power 2, Power 3) • Per Port: Link/Activity (Green: 10/100Mbps, Orange: 1000Mbps)
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)

Regulatory Approvals

ISO	• Manufactured in an ISO9001 facility
Safety	• UL508

EMI	• FCC Part 15, Class A, VCCI
	• EN61000-6-3
	  - EN55022
	  - EN61000-3-2
	  - EN61000-3-3

EMS	• EN61000-6-2
	  - EN61000-4-2 (ESD Standards)
	    Contact: + / - 4KV
	    Air: + / - 8KV
	  - EN61000-4-3 (Radiated RFI Standards)
	    10V/m, 80 to 1000MHz; 80% AM
	    3V/m, 1400 to 2000MHz; 80% AM
	    1V/m, 2000 to 2700MHz; 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	• 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-0823- 6 GE + 2 SFP Unmanaged Switch -40 to 75C, DIN-rail

Package Contents

IES-0823
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)