



# IES-0812

4 x 802.3af + 3 FE+ 1 MM SC Unmanaged Switch -10 to 60C, DIN-rail

## Quick Installation Guide

v1.00 - 1206

## Overview

LevelOne IES-0812 Industry Ethernet Switch provides 4 PoE ports of 10/100Base-TX plus 3 ports of 10/100Base-TX Ethernet 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.

### 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.

### 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.

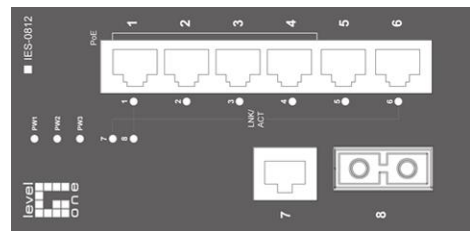
## Features

- Meets EN61000-6-2 & EN61000-6-3 EMC Generic Standard Immunity for industrial environment.
- Supports IEEE802.3af Power over Ethernet (PoE) Power Sourcing Equipment (PSE).
- Supports IEEE802.3/802.3u/802.3x. Auto-negotiation: 10/100Mbps, Full/Half-duplex, Auto-Negotiation, Auto MDI/MDIX.
- 100Base-FX: Multi/Single mode SC or ST type, WDM Single mode SC type.
- Supports 1024 MAC addresses. Provides 1M bits buffer memory.
- Alarms for power and port link failure by relay output.
- Power Supplies: Redundant 48VDC Terminal Block power inputs and 48VDC DC JACK with 100-240VAC external power supply.
- Operating voltage and Max. current consumption: 1.5A @ 48VDC. Power consumption: 72W Max.
- Operating temperature ranges from -10°C to 60°C.
- Supports DIN-Rail, Panel, or Rack Mounting installation

## Package Contents

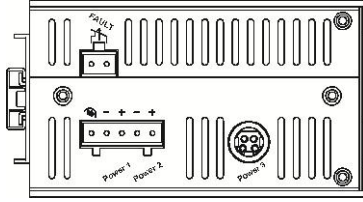
- IES-0812
- Quick Installation Guide
- CD User Manual

## LED Status



LED	Status	Description
PW 1,2,3	Steady	Power On
	Off	Power Off
<b>10/100Base-TX or 100Base-FX/BX</b>		
LNK/ACT (Green)	Steady	Network connection is established
	Flashing	Transmitting or Receiving data

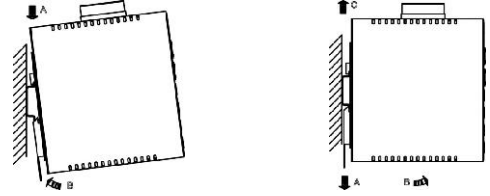
# Power Input



Terminal Block	PW1	+	48VDC
		-	Power Ground
	PW2	+	48VDC
		-	Power Ground
		<b>Earth Ground</b>	
		<b>Relay Output</b>	1A @ 24VDC
1. The relay contact opens if Power1 or Power2 falls 2. The relay contact opens if the Port Link is broken (When Link Down Detection is enabled)			

**PW3:** 48VDC DC Jack Input

# DIN Rail Mount



- Assembly: Place the switch on the DIN rail from above using the slot. Push the front of the switch toward the mounting surface until it audibly snaps into place
- Start-up: Connect the supply voltage to start up the switch via the terminal block (or DC JACK)
- Dismantling: Pull out the lower edge and then remove the switch from the DIN rail.

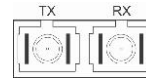
# 10/100Base-TX Connector

The following lists the pin-out of 10/100Base-TX ports.



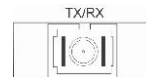
Pin	PoE Port (1 to 4)	Standard Port (5)
1	Output Transmit Data +	Input Receive Data +
2	Output Transmit Data -	Input Receive Data -
3	Input Receive Data +	Output Transmit Data +
4	Positive (VCC+)	NC
5	Positive (VCC+)	NC
6	Input Receive Data -	Output Transmit Data -
7	Negative (VCC-)	NC
8	Negative (VCC-)	NC

# 100Base-FX Connection



The Tx (transmit) port of device I is connected to the Rx (receive) port of device II, and the Rx (receive) port of device I to the Tx (transmit) port of device II.

# WDM 100Base-BX Connection



Only one optical fiber is required to transmit and receive data