



Infinity

## IES-0522

4 x 802.3af + 1 MM SC Unmanaged Switch -40 to 75C, Desktop

### Quick Installation Guide

v1.00 - 1206

## Overview

LevelOne IES-0522 Industry Ethernet Switch provides 4 PoE ports of 10/100Base-TX plus 1 ports 100FX Multimode SC fiber to enable high speed network at mission-critical environment. The compact metal housing is designed for desktop space saving, plus the clearly visible status LEDs provide simple monitoring of port link activity.

### 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.

IES-0522

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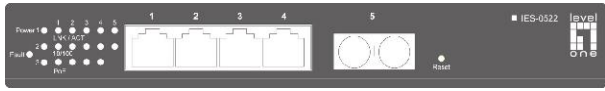
## Features

- Meets NEMA TS1 & TS2 Environmental requirements: temperature, shock, and vibration for traffic control equipment.
- Meets EN61000-6-2 & EN61000-6-4 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, 100Base-BX: WDM Multi/Single mode SC type.
- Supports 1024 MAC addresses. Provides 512K 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 optional 100-240VAC external power supply.
- Operating voltage and Max. current consumption: 1.5A @ 48VDC. Power consumption: 72W Max
- -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)
- Supports Desktop installation

## Package Contents

- IES-0522
- Quick Installation Guide
- CD User Manual

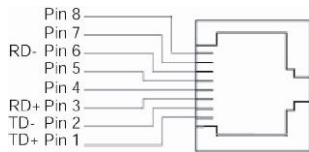
# LED Status



LED	Status	Description
PW 1,2,3	Steady	Power On
	Off	Power Off
<b>Fault</b>		
FAULT	Steady	Redundant power is failed or not being used
	Off	<ul style="list-style-type: none"> <li>Redundant power is active</li> <li>Port failure is not occurred</li> </ul>
<b>10/100Base-TX or 100Base-FX/BX</b>		
LNK/ACT	Steady	Networking connection is established
	Flashing	Transmitting or Receiving data
10/100	Steady	Connection at 100Mbps speed
	Off	Connection at 10Mbps speed

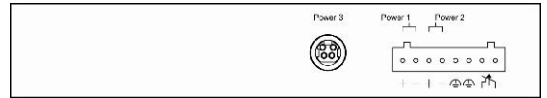
# 10/100Base-TX Connector

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

# Power Input

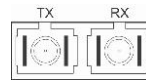


Terminal Block	PW1	+	48VDC
		-	Power Ground
	PW2	+	48VDC
		-	Power Ground
		Earth Ground	
	Relay Output	1A @ 24VDC	

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)

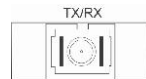
**PW3:** 48VDC DC Jack Input

# 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