level one ®

CO Infinity

IES-1611

15 FE + 1 MM SC Unmanaged Switch -10 to 60, DIN-rail

Quick Installation Guide

v1.00 - 1206

Overview

LevelOne IES-1611 Industry Ethernet Switch provides 15 ports of 10/100Base-TX Ethernet plus 1 port 100Base-FX MM 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.

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

- Meets EN61000-6-2 & EN61000-6-4 EMC Generic Standard Immunity for industrial environment.
- 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 4096 MAC addresses. Provides 1.625M bits buffer memory.
- Alarms for power failure by relay output 1A @ 24VDC.
- Power Supplies: Redundant 12-48VDC Terminal Block power inputs and 12VDC DC JACK with 100-240VAC external power supply.
- Field Wiring Terminal: Use Copper Conductors Only, 60/75 , 12-24 AWG torque value 7 lb-in.
- Operating voltage and Max. current consumption: 0.7A @ 12VDC, 0.35A @ 24VDC, 0.175A @ 48VDC. Power consumption: 8.4W Max.
- Operating temperature ranges from -10 to 60 (14 to 140). UL508 Industrial Control Equipment certified Maximum Surrounding Air Temperature @ 60 (140).
- For use in Pollution Degree 2 Environment.
- Supports Din-rail or Panel Mounting installation.
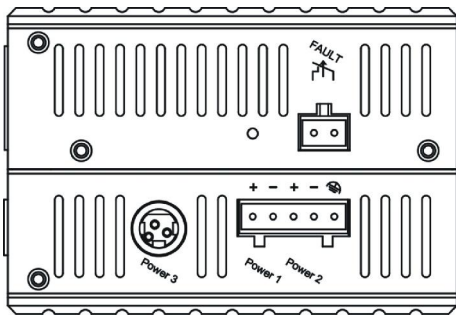
Package Contents

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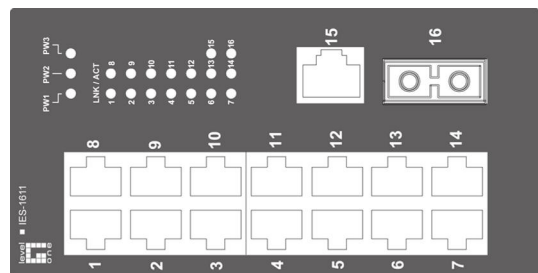
LED	Status	Description
PW 1,2,3	Steady	Power On
	Off	Power Off
10/100Base-TX or 100Base-FX		
LNK/ACT (Green)	Steady	Network connection is established
	Flashing	Transmitting or Receiving data

Power Input

Power1	+		12 – 48VDC
	–		Power Ground
Power2	+		12 – 48VDC
	–		Power Ground
⏚	**Earth Ground**		
⚡	**Relay Output**		

1. The relay contact closes if Power1 or Power2 falls
2. The relay contact closes if Power3 is failed but both Power1 and Power2 are On

**Power3:** 12VDC DC Jack Input type

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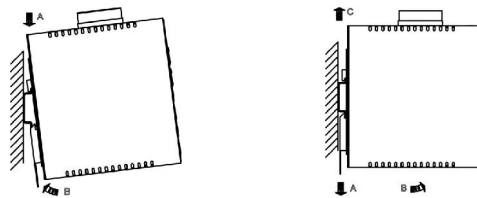
- Assembly: Place the switch on the DIN rail from above using the slot. Push the front of the switch toward the mounting surface until it audibly snaps into place
- Start-up: Connect the supply voltage to start up the switch via the terminal block (or DC JACK)
- Dismantling: Pull out the lower edge and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

10/100Base-TX Connector

The following lists the pin-out of 10/100Base-TX ports.
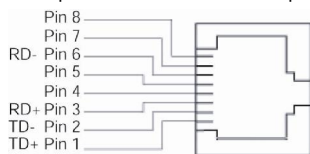
Pin	Standard Port	Uplink Port
1	Output Transmit Data +	Input Receive Data +
2	Output Transmit Data -	Input Receive Data -
3	Input Receive Data +	Output Transmit Data +
4	NC	NC
5	NC	NC
6	Input Receive Data -	Output Transmit Data -
7	NC	NC
8	NC	NC

100Base-FX Connection
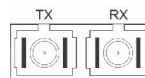
The Tx (transmit) port of device I is connected to the Rx (receive) port of device II, and the Rx (receive) port of device I to the Tx (transmit) port of device II.

WDM 100Base-BX Connection
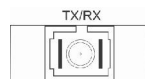
Only one optical fiber is required to transmit and receive data