Infinity

IES-1620

16 FE Unmanaged Switch -40 to 75, DIN-rail

Quick Installation Guide

v1.00 - 1206

Overview

LevelOne IES-1620 Industry Ethernet Switch provides 16 ports of 10/100Base-TX Ethernet 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.

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.

Traffic Control Application

This device is certified by NEMA (National Manufacturers Association) TS2 Environmental requirements for the Traffic Control Equipment that withstand extreme temperatures, operating voltage and humidity fluctuation, vibration and shock commonly experienced in severe outdoor environments.

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.

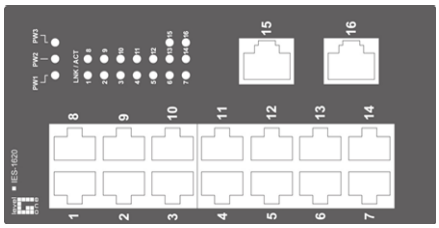
Features

- Meets NEMA TS1 & TS2 environmental requirements for traffic control equipment.
- Meets EN61000-6-2 & EN61000-6-3 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. 100Base-BX: 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.
- -40℃ to 75℃ (-40℉ to 167℉) operating temperature range. Tested for functional operation @ -40℃ to 85℃ (-40℉ to 185℉). UL508 Industrial Control Equipment certified Maximum Surrounding Air Temperature @ 75℃ (167℉).
- For use in Pollution Degree 2 Environment.
- Supports DIN-Rail or Panel Mounting installation

Package Contents

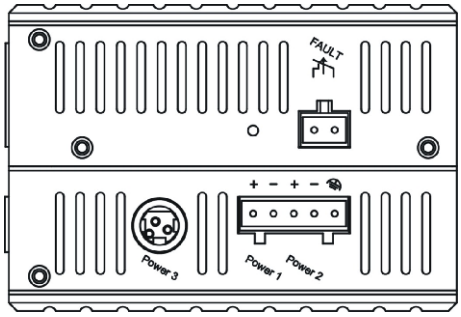
- IES-1620
- Quick Installation Guide

LED Status



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

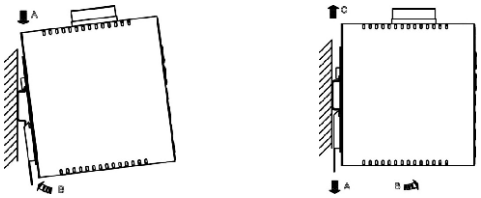
Power Input



Terminal Block	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

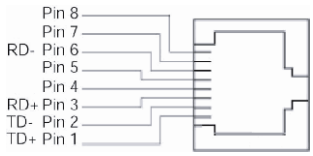
DIN Rail Mount



- 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.

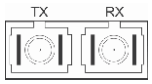
10/100Base-TX Connector

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



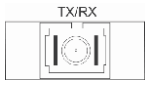
Pin	Standard Port	Uplink Port
1	Output Transmit Data +	Input Receive Data +
2	Output Transmit Data -	Input Receive Data -
3	Input Receive Data +	Output Transmit Data +
4	NC	NC
5	NC	NC
6	Input Receive Data -	Output Transmit Data -
7	NC	NC
8	NC	NC

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