level one®

COInfinity

IES-0853

4 x 802.3at + 3 FE + 1 MM SC Web Smart Switch -40 to 75C, DIN-rail

Quick Installation Guide

Overview

LevelOne IES-0853 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 fibre 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.

Web Management

Web-based GUI management features implementation of Port-based VLAN, IEEE802.1p QoS, Prioritised DSCP, set up Admin Password with ease. Plus, the Power over Ethernet ports can be On / Off and limits the power budget remotely.
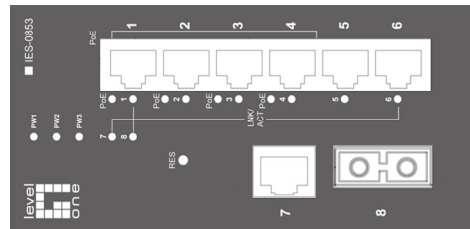
Power over Ethernet

This switch is Power Sourcing Equipment (PSE), and it is fully complied with IEEE 802.3at PoE standard at maximum 30W power budget per port. It helps to save infrastructure wiring costs dramatically by eliminating electric wiring and less UPS needed. Also, it is compatible with IEEE802.3af standard PD devices.

Features

- Meets NEMA TS1/TS2 Environmental requirements such as temperature, shock, and vibration for traffic control equipment.
- Meets EN61000-6-2 & EN61000-6-3 EMC Generic Standard Immunity for industrial environment.
- Manageable via Web browser interface.
- Supports IEEE802.3af Power over Ethernet (PoE) Power Sourcing Equipment (PSE).
- High Power PoE design up to 30W (enhancement of IEEE802.3af PoE).
- Supports 802.3/802.3u/802.3x. Auto-negotiation: 10/100Mbps, full/half-duplex; Auto MDI/MDIX.
- 100Base-FX: Multi mode SC or ST type, Single mode SC or ST type. 100Base-BX: WDM Single mode SC type.
- Supports 1024 MAC addresses. Provides 1M bits memory buffer.
- Alarms for power and port link failure by relay output.
- PoE: Redundant 48VDC Terminal Block power inputs and 48VDC DC JACK power input for 15.4W per PoE port. Operating voltage and Max. current consumption: 1.5A @ 48VDC. Power consumption: 72W Max.
- High Power PoE: Redundant 55VDC Terminal Block power inputs and 55VDC DC JACK power input for 30W per High Power PoE port. Operating voltage and Max. current consumption: 2.3A @ 55VDC. Power consumption: 130W Max.
- -40℃ to 75℃ (-40°F to 167°F) operating temperature range. Tested for functional operation @ -40℃ to 85℃ (-40°F to 185°F). Web-Smart function operating temperature @ -20℃ to 85℃ (-4°F to 185°F).
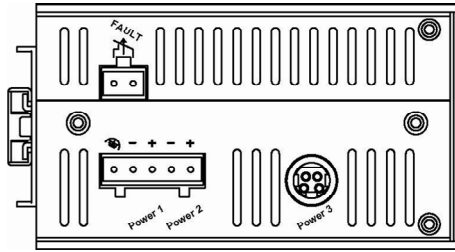- Supports Din-Rail, Panel, or Rack Mounting installation.

Package Contents

- IES-0853
- Quick Installation Guide
- CD User Manual

LED Status

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

Power Input

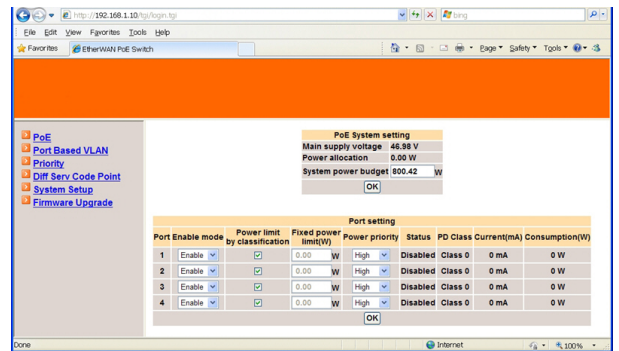| Terminal Block			
PW1	+	48VDC, 55VDC (High Power)
	–	Power Ground
PW2	+	48VDC, 55VDC (High Power)
	–	Power Ground
⏚	**Earth Ground**	
⚡	**Relay Output**	0.1A @ 24VDC

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)

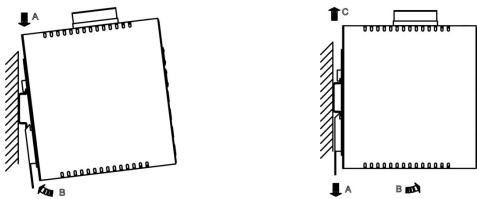**PW3:** 48VDC, 55VDC (High Power) DC Jack Input

Web Configuration

Default

- IP address: **192.168.1.10**
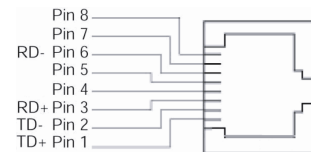- User Name: **admin**
- Password: [Blank]

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