



Infinity IES-1085

4 x 802.3af + 4 x 802.3at + 2 GE SFP Managed Switch -40 to 75C,
DIN-rail

Quick Installation Guide

Default Setting

| | |
|----------|-----------------|
| IP | 192.168.1.10 |
| Login | root |
| Password | [blank] |
| Console | 115200, n, 8, 1 |

v1.00 - 1206

Overview

LevelOne IES-1085 Industry Ethernet Switch provides 8 PoE ports of 10/100Base-TX plus 2 1000Base SFP slots Ethernet to enable high speed network at mission-critical environment. This device is designed to be mounted on an industry standard DIN-rail.

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.

Resilient Ring Network

Supports Ring topology network providing simple installation and ultra fast network recovery performance, less than 15ms. Unlike much complex resilient topology, such as a redundant star, the Ring simplifies the network design and requires less cabling installation. In addition, fast network recovery time helps minimize system downtime.

Power over Ethernet

This switch is Power Sourcing Equipment (PSE), and it is fully complied with IEEE 802.3af/at PoE standard at maximum 15.4/30W power budget per port. It helps to save infrastructure wiring costs dramatically by eliminating electric wiring and less UPS needed.

Features

- Meets NEMA TS1/TS2 Environmental requirements such as temperature, shock, and vibration for traffic control equipment.
- Meets EN61000-6-2 & EN61000-6-4 EMC Generic Standard Immunity for industrial environment.
- RS-232 console, Telnet, SNMP v1 & v2c & v3, RMON, Web Browser, and TFTP management.
- Supports IEEE802.3af Power over Ethernet (PoE) Power Sourcing Equipment (PSE).
- Supports IEEE802.3/802.3u/802.3ab/802.3z/802.3x. Auto-negotiation: 1000Mbps-full-duplex; 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.
- 1000Base-SX/LX: Multi mode or Single mode SC type. 1000Base-BX: WDM Single mode SC type.
- Alarms for power and port link failure by relay output.
- Power Supply: Redundant 47-57VDC Terminal Block power inputs or 47-57VDC DC Jack power input.
- Field Wiring Terminal: Use Copper Conductors Only, 60/75°C, 12-24 AWG torque value 7 lb-in.
- Operating voltage and Max. current consumption: 0.31A @ 48VDC. Power consumption: Power consumption: 230W Max. (Full load with PoE), 15W Max. (Without PoE).
- -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). UL508 Industrial Control Equipment certified Maximum Surrounding Air Temperature @ 75°C (167°F).
- For use in Pollution Degree 2 Environment.
- Metal case with Din-Rail or Panel Mounting installation

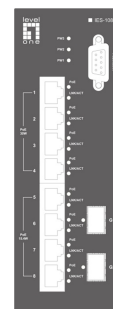
<Note> Make sure to readjust RTC Time of this switch to function accurately after this switch has been powered off for over 72 hours.

Package Contents

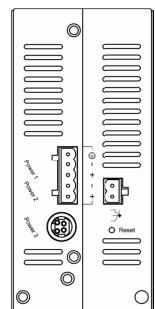
- IES-1085
- Quick Installation Guide
- CD User Manual / Utility

Physical Description

Front Panel



Rear Panel



Power Input

| | | | |
|----------------|--------------|--------------|--------------|
| Terminal Block | PW1 | + | 47 – 57VDC |
| | | - | Power Ground |
| | PW2 | + | 47 – 57VDC |
| | | - | Power Ground |
| | ⊕ | Earth Ground | |
| ⚡ | Relay Output | 1A @ 250VAC | |

Relay Alarm warning signal disable for following:

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

- There are three power inputs can be used. Redundant power function is supported

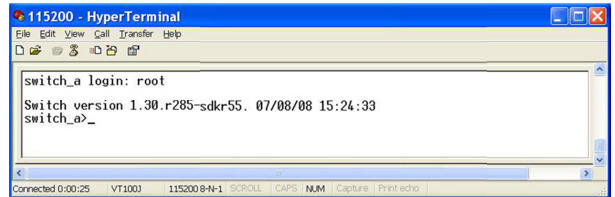
PW3 is DC Jack type with 47 – 57VDC input

LED Status

| LED | Status | Description |
|---|----------|-----------------------------------|
| PW 1,2,3 | Steady | Power On |
| | Off | Power Off |
| 10/100Base-TX | | |
| LNK/ACT | Steady | Network connection established |
| | Flashing | Transmitting or Receiving data |
| PoE | Steady | Power Device (PD) is connected |
| | Off | Power Device (PD) is disconnected |
| 100Base-FX | | |
| LNK/ACT | Steady | Network connection established |
| | Flashing | Transmitting or Receiving data |
| 10/100/1000Base-TX & 1000Base-FX & SFP | | |
| LNK/ACT | Steady | Network connection established |
| | Flashing | Transmitting or Receiving data |

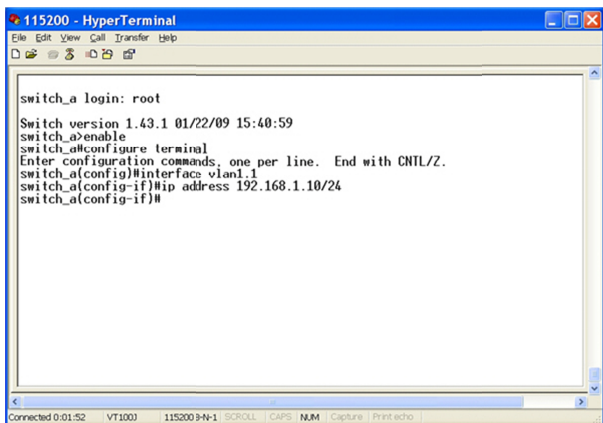
Console Configuration

1. Connect to the switch console:
2. Connect the DB9 straight cable to the RS-232 serial port of the device and the RS-232 serial port of the terminal or computer running the terminal emulation application. Direct access to the administration console is achieved by directly connecting a terminal or a PC equipped with a terminal-emulation program (such as HyperTerminal) to the switch console port.
3. Configuration settings of the terminal-emulation program:
4. Baud rate: 115,200bps, Data bits: 8, Parity: none, Stop bit: 1, Flow control: none.
5. Press the "Enter" key. The Command Line Interface (CLI) screen should appear as below:
6. Logon to Exec Mode (View Mode):
7. At the "switch_a login:" prompt just type in "root" and press <Enter> to logon to Exec Mode (or View Mode). And the "switch_a_" prompt will show on the screen.



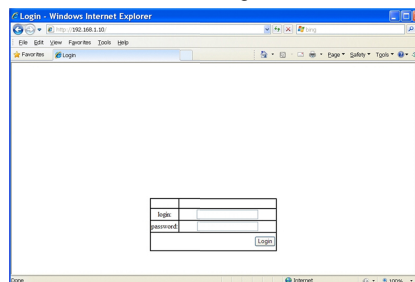
8. Logon to Privileged Exec Mode (Enable Mode):
9. At the "switch_a_" prompt just type in "enable" and press <Enter> to logon to Privileged Exec Mode (or Enable Mode). And the "switch_a#" prompt will show on the screen.
10. Logon to Configure Mode (Configure Terminal Mode):
11. At the "switch_a#" prompt just type in "configure terminal" and press <Enter> to logon to Configure Mode (or Configure

- Terminal Mode). And the "switch_a(config)#" prompt will show on the screen.
12. Set new IP address and subnet mask for Switch:
 13. At the "switch_a(config)#" prompt just type in "interface vlan1.1" and press <Enter> to logon to vlan 1 (vlan1.1 means vlan 1). And the "switch_a(config-if)#" prompt will show on the screen.
 14. Command Syntax: "ip address A.B.C.D/M". "A.B.C.D" specifies IP address. "M" specifies IP subnet mask. "M" = 8: 255.0.0.0, 16:255.255.0.0, or 24: 255.255.255.0.
 15. For example, At the "switch_a(config-if)#" prompt just type in "ip address 192.168.1.10/24" and press <Enter> to set new IP address (192.168.1.10) and new IP subnet mask (255.255.255.0) for Switch

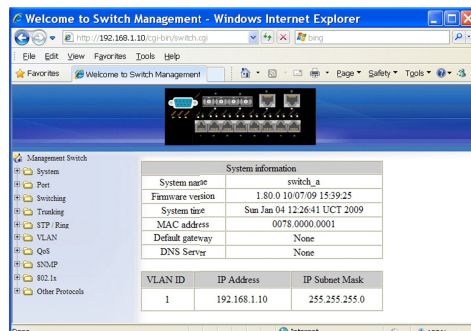


Web Configuration

1. Login the switch:
2. Specify the default IP address (192.168.1.10) of the switch in the web browser. A login window will be shown as below:



3. Enter the factory default login ID: root.
4. Enter the factory default password (no password).
5. Then click on the "Login" button to log on to the switch.



Note: Please refer to User Manual for more detailed information