

## 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-1084 Industry Ethernet Switch provides 8 PoE ports of 10/100Base-TX plus 2 ports of 10/100/1000Base Gigabit 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

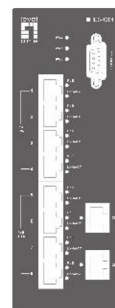
<Note> Make sure to readjust RTC Time of this switch to function accurately after this switch has been powered off for over 72 hours.

## Package Contents

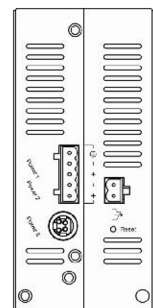
- IES-1084
- Quick Installation Guide
- CD User Manual / Utility

## 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
<b>10/100Base-TX</b>		
LNK/ACT	Steady	Network connection established
	Flashing	Transmitting or Receiving data
PoE	Steady	Power Device (PD) is connected
	Off	Power Device (PD) is disconnected
<b>100Base-FX</b>		
LNK/ACT	Steady	Network connection established
	Flashing	Transmitting or Receiving data
<b>10/100/1000Base-TX &amp; 1000Base-FX &amp; SFP</b>		
LNK/ACT	Steady	Network connection established
	Flashing	Transmitting or Receiving data

# Console Configuration

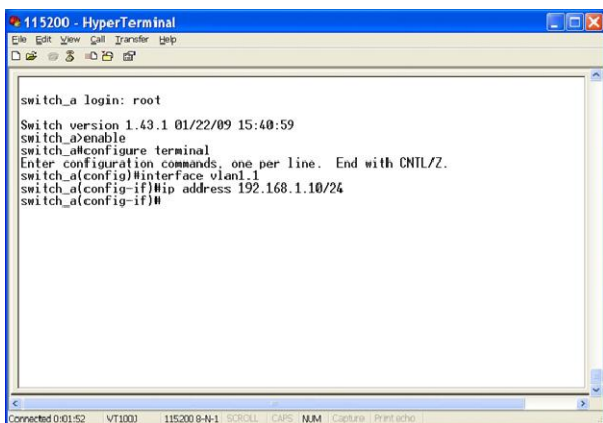
1. Connect to the switch console:
2. Connect the DB9 straight cable to the RS-232 serial port of the device and the RS-232 serial port of the terminal or computer running the terminal emulation application. Direct access to the administration console is achieved by directly connecting a terminal or a 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

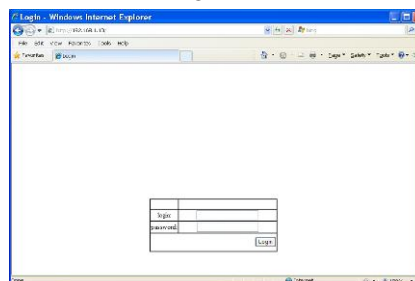
Terminal Mode). And the "switch\_a(config)#" prompt will show on the screen.

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

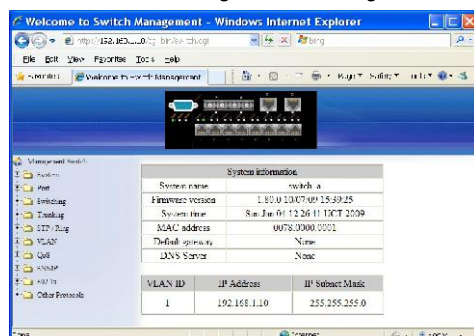


# Web Configuration

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