level one®

CO Infinity

IES-0880

8 GE Managed Switch -20 to 60C, 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-0880 Industry Ethernet Switch provides 8 ports of Gigabit 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 -20 to 60 Celsius (-4 to 140 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.

Management

Supports a variety of management features including: CLI via Console or Telnet; Graphic User Interface via Web Browser or Simple Network Management Protocol via SNMP tools. It provides better visibility and management of those critical assets.
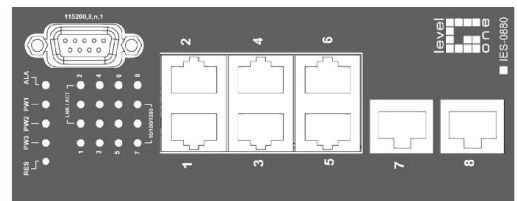
Features

- Meets EN61000-6-2 & EN61000-6-4 EMC Generic Standard Immunity for industrial environment.
- Manageable via SNMP, Web-based, Telnet, and RS-232 console port.
- Supports Command Line Interface in RS-232 console.
- Supports IEEE802.3/802.3u/802.3ab/802.3z/802.3x. Auto-negotiation: 10/100/1000Mbps, full/half-duplex. Auto MDI/MDIX.
- 1000Base-SX/LX: Multi mode or Single mode SC type; 1000Base-BX: WDM Single mode SC type.
- Support 4096 MAC addresses. Provides 1M bits memory buffer.
- Store-and-forward mechanism.
- Full wire-speed forwarding rate.
- Alarms for power failure by relay output.
- Operating voltage and Max. current consumption: 1.7A @ 12VDC, 0.85A @ 24VDC. Power consumption: 20.4W Max.
- Power supply: Redundant DC Terminal Block power inputs and 12VDC DC JACK with 100-240VAC external power supply.
- Field Wiring Terminal Markings: Use Copper Conductors Only, 60/75℃, wire range 12-24 AWG, torque value 7 lb-in.
- -20℃ to 60℃ (-4°F to 140°F) operating temperature range. UL508 Industrial Control Equipment certified Maximum Surrounding Air Temperature @ 60℃ (140°F).
- For use in Pollution Degree 2 Environment.
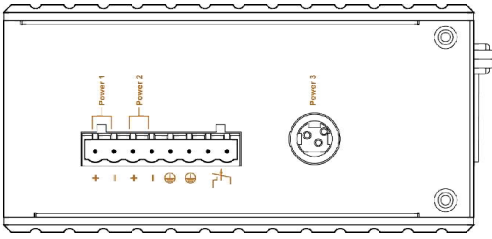- Supports Din-Rail or Panel Mounting installation

Package Contents

- IES-0880
- Quick Installation Guide

LED Status

LED	Status	Description
PW 1,2,3	Steady	Power On
	Off	Power Off
ALA (Alarm)	Steady	Redundancy Power is failed
	Off	Redundancy Power is activated
10/100/1000Base-TX & 1000Base-SX / LX / BX		
LNK/ACT	Steady	Network connection established
	Flashing	Transmitting or Receiving data
Speed	Amber	Connection at 1000Mbps
	Green	Connection at 100Mbps
	Off	Connection at 10Mbps

Power Input

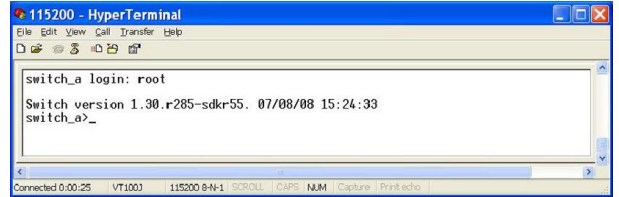| Terminal Block			
	PW1	+	12 – 32VDC
		–	Power Ground
	PW2	+	12 – 32VDC
		–	Power Ground
	⏚	**Earth Ground**	
	⏚	**Relay Output**	1A @ 24VDC
	Relay Alarm warning signal disable for following: 1. The relay contact closes if Power1 and Power2 are both failed but Power3 on 2. The relay contact closes if Power3 is failed but Power1 and Power2 are both on		

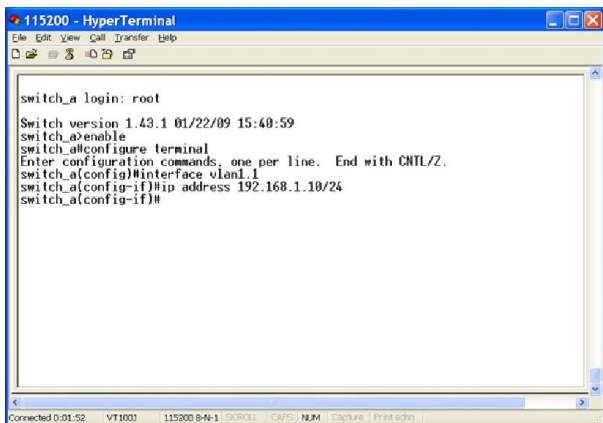**PW3** is DC Jack type with 12VDC input

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
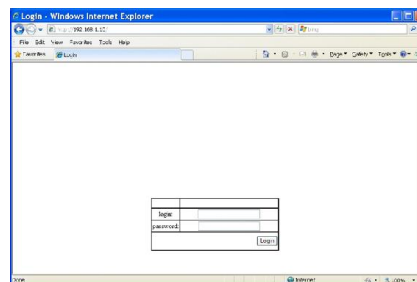
Terminal Mode). And the "switch_a(config)#" prompt will show on the screen.
12. Set new IP address and subnet mask for Switch:
13. At the "switch_a(config)#" prompt just type in "interface vlan1.1" and press <Enter> to logon to vlan 1 (vlan1.1 means vlan 1). And the "switch_a(config-if)#" prompt will 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
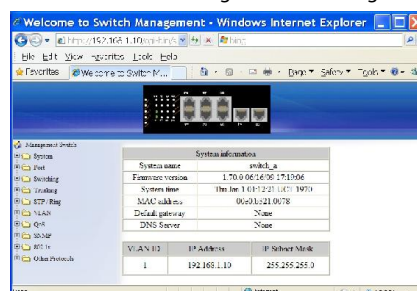
Web Configuration

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