



Infinity IES-1870

16 FE + 2 GE Managed Switch -10 to 60C, DIN-rail

Quick Installation Guide

Default Setting

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

Overview

v1.00 - 1206

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.
- Support 802.3/802.3u/802.3ab/802.3z/802.3x. Auto-negotiation: 10/100/1000Mbps, full/half-duplex; Auto MDI/MDIX.
- 100Base-FX: Multi mode SC or ST type; Single mode SC or ST type; WDM Single mode SC type.
- 1000Base-SX/LX: Multi mode or Single mode SC type; WDM Single mode SC type.
- Support 8192 MAC addresses. Provides 2M bits memory buffer.
- Alarms for power and port link failure by relay output.
- Operating voltage and Max. current consumption: 1.25A @ 12VDC, 0.625A @ 24VDC, 0.313A @ 48VDC. Power consumption: 15W Max.
- Power Supply: Redundant DC Terminal Block power inputs or 12VDC DC JACK with 100-240VAC external power supply.
- -10°C to 60°C (14°F to 140°F) operating temperature range.
- Supports Din-Rail or Panel Mounting installation

Package Contents

- IES-1870
- Quick Installation Guide
- CD User Manual

LevelOne IES-1870 Industry Ethernet Switch provides 16 ports of 10/100Base-TX plus 2 ports of 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, plus the clearly visible status LEDs provide simple monitoring of port link activity.

Cost Effective

This device operates under -10 to 60 Celsius (-14 to 140 Fahrenheit) temperature that offers optimal suitability for industrial applications at low cost while maintaining all components built to withstand harsh environment applications without compromise reliability and stability.

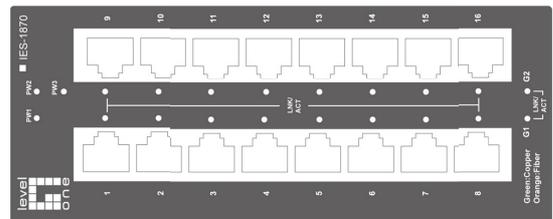
Resilient Ring Network

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.

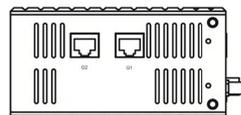
Management

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.

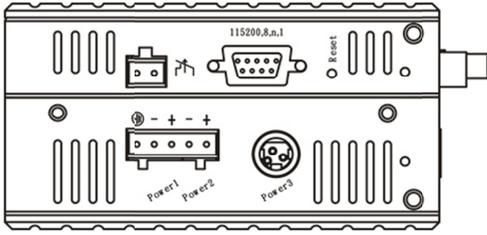
LED Status



LED	Status	Description
PW 1,2,3	Steady	Power On
	Off	Power Off
10/100Base-TX, 100Base-FX		
LNK/ACT	Steady	Network connection is established
	Flashing	Transmitting or Receiving data
10/100	Steady	Connection speed at 100Mbps
	Off	Connection speed at 10Mbps
10/100/1000Base-TX (Green) 1000Base-SX/LX (Orange)		
LNK/ACT	Steady	Network connection is established
	Flashing	Transmitting or Receiving data



Power Input



Terminal Block	Power1	+	12 to 48VDC
		-	Power Ground
	Power2	+	12 to 48VDC
		-	Power Ground
		Earth Ground	
	Relay Output		1A @ 24VDC

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

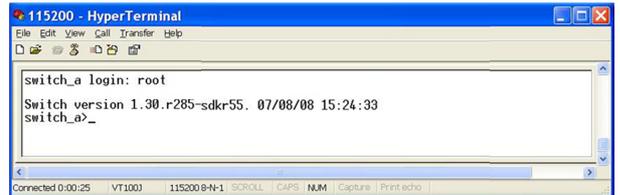
Power3: DC Jack type with 12VDC Input

Note:

There are two pairs of power inputs can be used to power up this switch. Redundant power supplies function is supported.

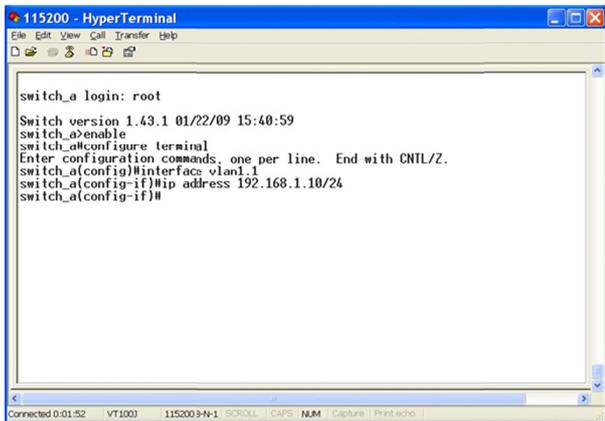
Console Configuration

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.



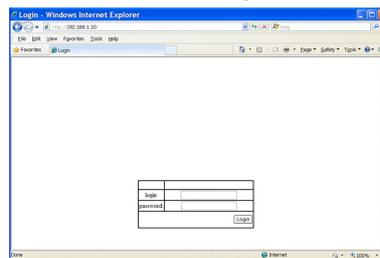
8. Logon to Privileged Exec Mode (Enable Mode):
9. At the "switch_a#" prompt just type in "enable" and press <Enter> to logon to Privileged Exec Mode (or Enable Mode). And the "switch_a#" prompt will show on the screen.
10. Logon to Configure Mode (Configure Terminal Mode):
11. At the "switch_a#" prompt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

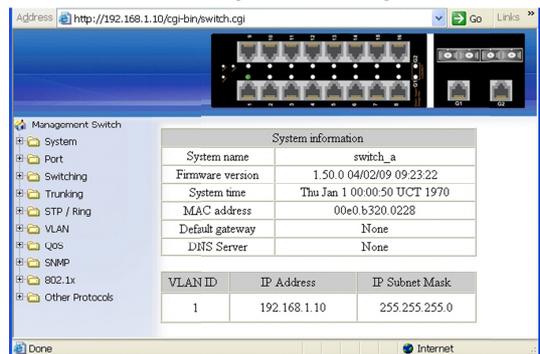


Web Configuration

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