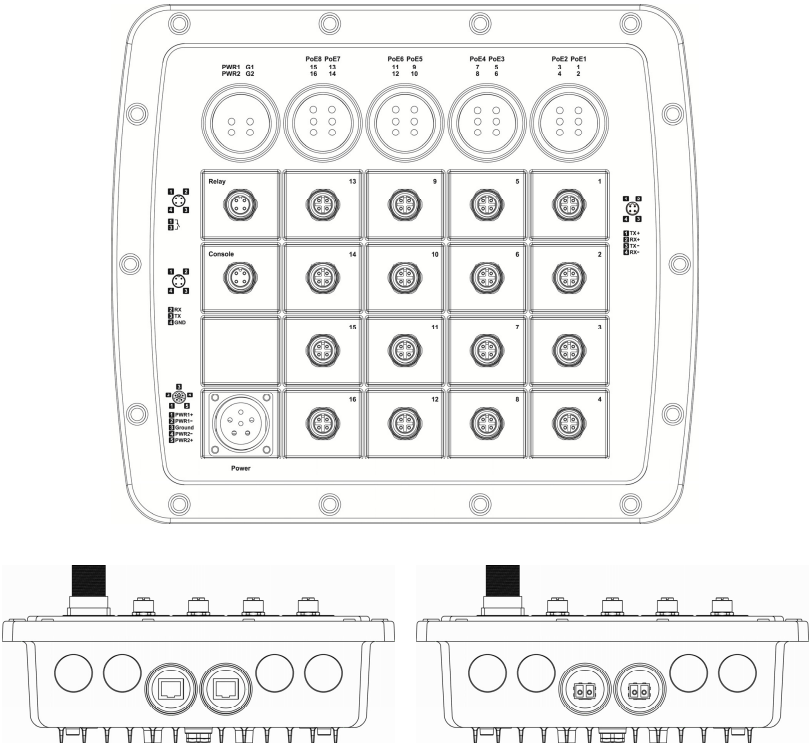


This quick start guide describes how to install and use the IP67 M12 Hardened Managed PoE Ethernet Switch. This is the switch of choice for harsh environments.

Physical Description

The Port Status LEDs and Power Inputs



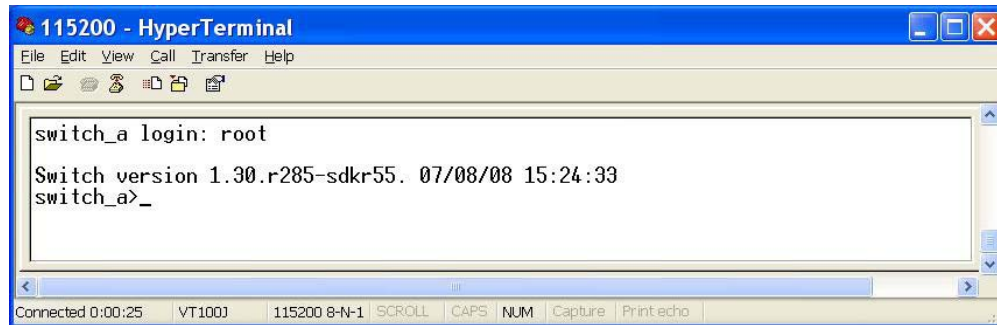
LED	State	Indication
10/100Base-TX		
Link/ACT	Steady	A valid network connection established.
	Flashing	Transmitting or receiving data. ACT stands for ACTIVITY.
PoE	Steady	Power Device (PD) is connected.
	Off	Power Device (PD) is disconnected.
10/100/1000Base-TX, 1000Base-SX/LX		
Link/ACT	Steady	A valid network connection established.
	Flashing	Transmitting or receiving data. ACT stands for ACTIVITY.

Power Input Assignment		
Power1, 2	+	55VDC
	-	Power Ground
	Earth Ground	
	Relay Output Rating	
		1A @ 250VAC

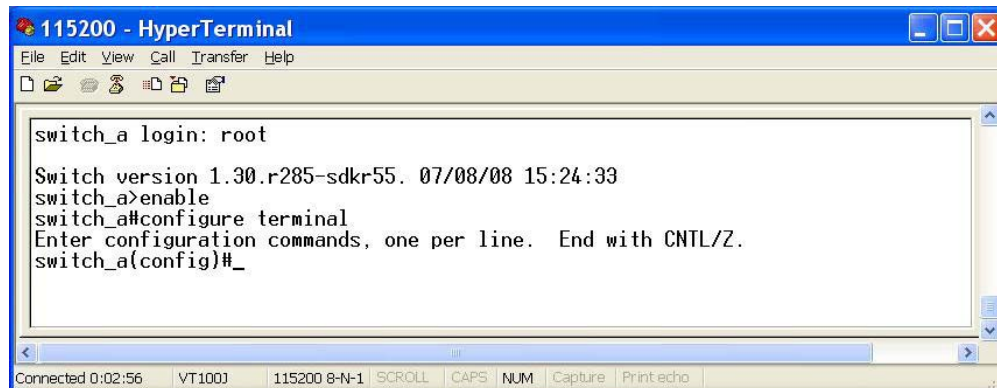
- Functional Description
- Complies with EN50155, EN50121-3-2, and EN50121-4 environmental requirements for Railway applications.
  - Meets EN61000-6-2 & EN61000-6-4 EMC Generic Standard Immunity for industrial environment.
  - RS-232 console (M12 A-Coding female 4-pin connector), Telnet, SNMP v1 & v2c & v3, RMON, Web Browser, and TFTP management.
  - Supports Command Line Interface in RS-232 console.
  - Supports 8192 MAC addresses.
  - Supports PoE Power Sourcing Equipment (PSE).
  - Port 1 to 8 supports IEEE802.3at PoE 30W Max.
  - 8-port IEEE802.3at (Power budget 240W Max.).
  - Supports IEEE802.3/802.3u/802.3ab/802.3z/802.3x. Auto-negotiation: 1000Mbps-full-duplex; 10/100Mbps-full/half-duplex. Auto MDI/MDIX.
  - Provides up to 16-port 10/100Base-TX (M12 D-Coding female 4-pin connector) plus 2-port 10/100/1000Base-TX RJ-45 Copper or 1000Base-SX/LX LC Fiber waterproof connector.
  - Store-and-forward mechanism. Full wire-speed forwarding rate.
  - Alarms (M12 A-Coding female 4-pin connector) for port and power failure by relay output.
  - Power Supply: Redundant 55VDC power inputs (M23 A-Coding male 5-pin connector).
  - Power consumption: 251W Max. (Device with PoE), 11W Max. (Device without PoE).
  - 40°C to 75°C (-40°F to 167°F) operating temperature range.
  - IP67 grade metal case.

- Console Configuration
- Connect to the switch console:  
Connect the straight console cable to the RS-232 serial port (M12 A-Coding female 4-pin connector) 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.
  - Configuration settings of the terminal-emulation program:

Baud rate	Data bits	Parity	Stop bit	Flow control
115,200bps	8	none	1	none
  - Press the “Enter” key. The Command Line Interface (CLI) screen should appear as below:
  - Logon to Exec Mode (View Mode):  
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.

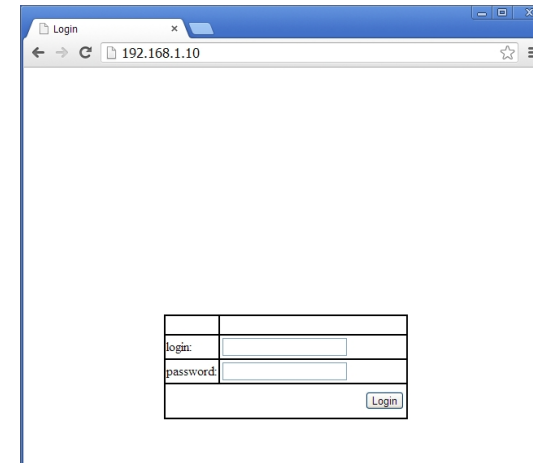


- Logon to Privileged Exec Mode (Enable Mode):  
At the "switch\_a>" prompt just type in "enable" and press <Enter> to logon to Privileged Exec Mode (or Enable Mode). And the "switch\_a#" prompt will show on the screen.
- Logon to Configure Mode (Configure Terminal Mode):  
At the "switch\_a#" prompt 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.
- Set new IP address and subnet mask for Switch:  
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.  
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.  
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

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



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

