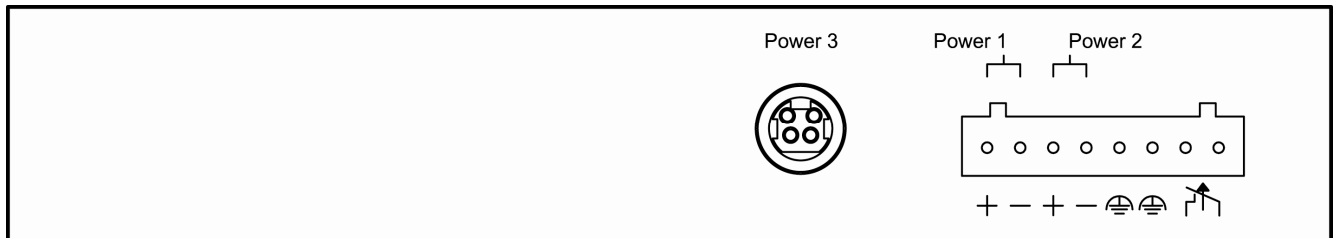
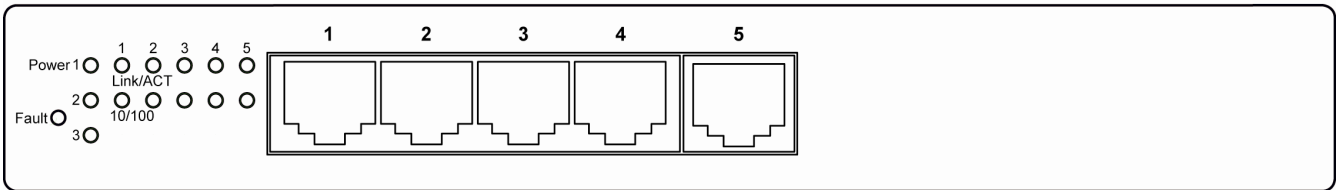
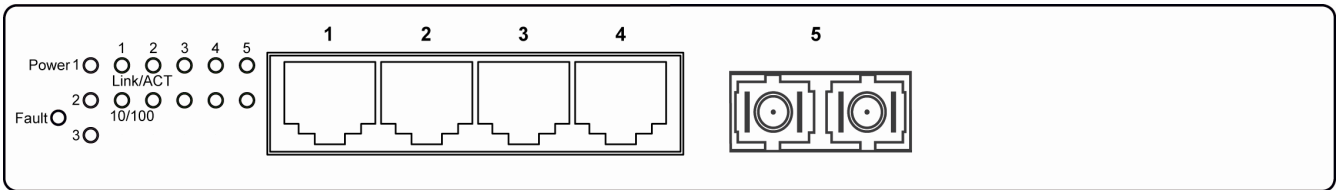


Hardened PoE Ethernet Switch

This quick start guide describes how to install and use the Hardened PoE Ethernet Switch. This is the switch of choice for harsh environments constrained by space.

Physical Description

The Port Status LEDs and Power inputs



LED	State	Indication
Power1	Steady	Power on.
Power2	Off	Power off.
Power3		
Fault	Steady	Power redundant system failure occurred.
	Off	Power redundant system failure is not occurred.
10/100Base-TX, 100Base-FX/BX		
Link/ACT	Steady	A valid network connection established.
	Flashing	Transmitting or receiving data. ACT stands for ACTIVITY.
10/100	Steady	Valid port connection at 100Mbps.
	Off	Valid port connection at 10Mbps.

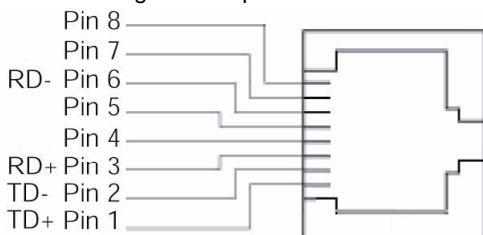
Power Input Assignment		
Power3	48VDC	DC Jack
Power2	+	48VDC
	-	Power Ground
Power1	+	48VDC
	-	Power Ground
	Earth Ground	
Relay Output Rating		1A @ 24VDC
Relay Alarm Assignment		
FAULT	*Relay warning signal disable for following: 1. The relay contact closes if Power1 and Power2 are both failed but Power3 on. 2. The relay contact closes if Power3 is failed but Power1 and Power2 are both on.	

DC Terminal Block Power Inputs: There are two pairs of power inputs can be used to power up this switch. Redundant power supplies function is supported.

The 10/100Base-TX and 100Base-FX/BX Connectors

The 10/100Base-TX Connections

The following lists the pinouts of 10/100Base-TX ports.



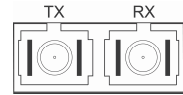
Pin	PoE Ports (Port 1-4)	Non-PoE Port (Port 5)
1	Output Transmit Data +	Output Transmit Data +
2	Output Transmit Data -	Output Transmit Data -
3	Input Receive Data +	Input Receive Data +
4	Positive (VCC+)	
5	Positive (VCC+)	
6	Input Receive Data -	Input Receive Data -
7	Negative (VCC-)	
8	Negative (VCC-)	

Hardened PoE Ethernet Switch

The 100Base-FX Connections

The fiber port pinouts

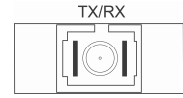
The Tx (transmit) port of device I is connected to the Rx (receive) port of device II, and the Rx (receive) port of device I to the Tx (transmit) port of device II.



The WDM 100Base-BX Connections

The fiber port pinouts

Only one optical fiber is required to transmit and receive data.



Functional Description

- Meets NEMA TS1 & TS2 Environmental requirements: temperature, shock, and vibration for traffic control equipment.
- Meets EN61000-6-2 & EN61000-6-4 EMC Generic Standard Immunity for industrial environment.
- Supports IEEE802.3af Power over Ethernet (PoE) Power Sourcing Equipment (PSE).
- Supports IEEE802.3/802.3u/802.3x. Auto-negotiation: 10/100Mbps, Full/Half-duplex, Auto-Negotiation, Auto MDI/MDIX.
- 100Base-FX: Multi/Single mode SC or ST type, 100Base-BX: WDM Multi/Single mode SC type.
- Supports 1024 MAC addresses. Provides 512K bits buffer memory.
- Alarms for power and port link failure by relay output.
- Power Supplies: Redundant 48VDC Terminal Block power inputs and 48VDC DC JACK with optional 100-240VAC external power supply.
- Operating voltage and Max. current consumption: 1.5A @ 48VDC. Power consumption: 72W Max.
- -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).
- Supports Desktop installation.