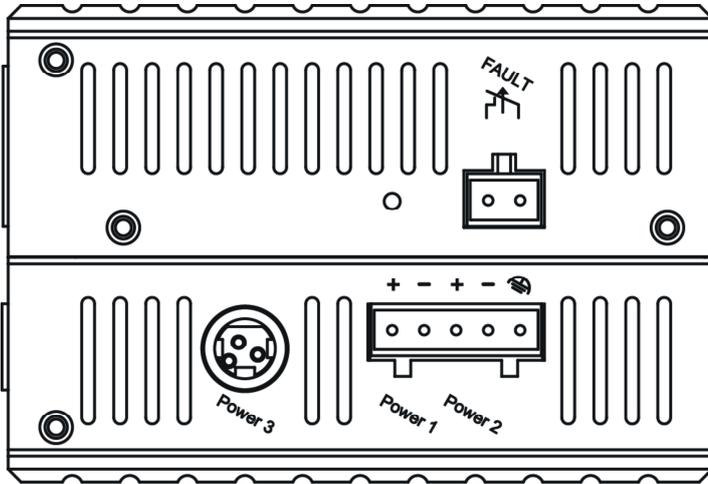


Hardened Ethernet Switch

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

Physical Description

The Terminal Block and Power inputs



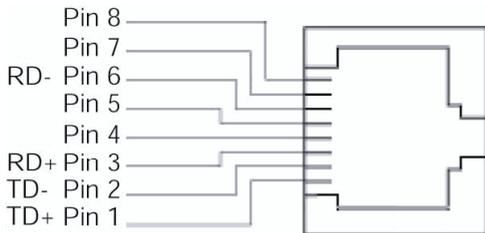
Power Input Assignment		
Power3		12VDC DC Jack
Power2	+	12-48VDC
	-	Power Ground
Power1	+	12-48VDC
	-	Power Ground
		Earth Ground
Relay Alarm Assignment		
FAULT	*Relay warning signal disable for following: 1. The relay contact closes if Power1 and Power2 are both failed but Power3 on. 2. The relay contact 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.

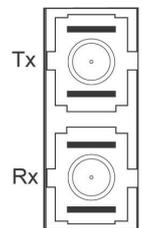


Pin	Regular Ports	Uplink port
1	Output Transmit Data +	Input Receive Data +
2	Output Transmit Data -	Input Receive Data -
3	Input Receive Data +	Output Transmit Data +
4	NC	NC
5	NC	NC
6	Input Receive Data -	Output Transmit Data -
7	NC	NC
8	NC	NC

The 100Base-FX Connections

The fiber port pinouts

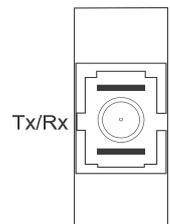
The Tx (transmit) port of device I is connected to the Rx (receive) port of device II, and the Rx (receive) port of device I to the Tx (transmit) port of device II.



The WDM 100Base-BX Connections

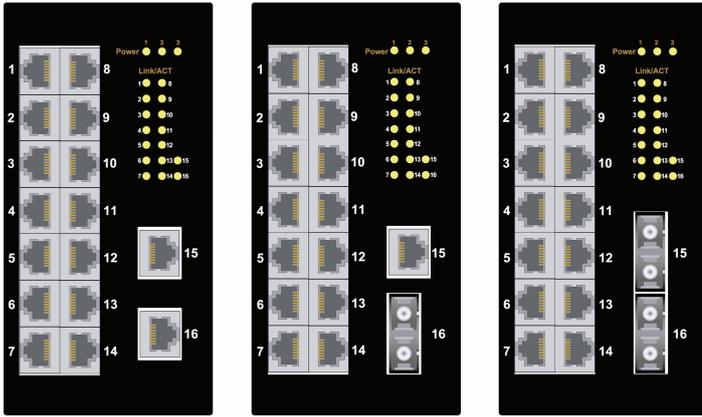
The fiber port pinouts

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



Hardened Ethernet Switch

The Port Status LEDs



LED	State	Indication
10/100Base-TX, 100Base-FX/BX		
Link/ACT (Green)	Steady	A valid network connection established.
	Flashing	Transmitting or receiving data. ACT stands for ACTIVITY.

Functional Description

- Meets NEMA TS1 & TS2 environmental requirements for traffic control equipment.
- Meets EN61000-6-2 & EN61000-6-3 EMC Generic Standard Immunity for industrial environment.
- 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 Single mode SC type.
- Supports 4096 MAC addresses. Provides 1.625M bits buffer memory.
- Alarms for power failure by relay output 1A @ 24VDC.
- Power Supplies: Redundant 12-48VDC Terminal Block power inputs and 12VDC DC JACK with 100-240VAC external power supply.
- Field Wiring Terminal: Use Copper Conductors Only, 60/75°C, 14-24 AWG torque value 4.5 lb-in.
- Operating voltage and Max. current consumption: 0.7A @ 12VDC, 0.35A @ 24VDC, 0.175A @ 48VDC. Power consumption: 8.4W 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). UL508 Industrial Control Equipment certified Maximum Surrounding Air Temperature @ 75°C (167°F).
- For use in Pollution Degree 2 Environment.
- Supports DIN-Rail or Panel Mounting installation.

Assembly, Startup, and Dismantling

- Assembly: Place the switch on the DIN rail from above using the slot. Push the front of the switch toward the mounting surface until it audibly snaps into place.
- Startup: Connect the supply voltage to start up the switch via the terminal block (or DC JACK).
- Dismantling: Pull out the lower edge and then remove the switch from the DIN rail.

