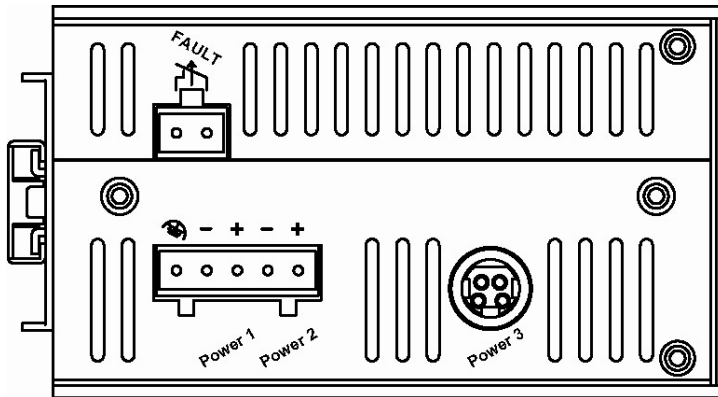## *Hardened PoE Ethernet Switch*

This quick start guide describes how to install and use the Hardened PoE Ethernet Switch. Capable of operating at temperature extremes of -10°C to +60°C, this is the switch of choice for harsh environments constrained by space.

# Physical Description

The Terminal Block and Power inputs

Power Input Assignment			
Power3		48VDC	DC Jack
Power2	+	48VDC	Terminal Block
	−	Power Ground	
Power1	+	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 Connectors

The 10/100Base-TX Connections

The following lists the pinouts of 10/100Base-TX ports.
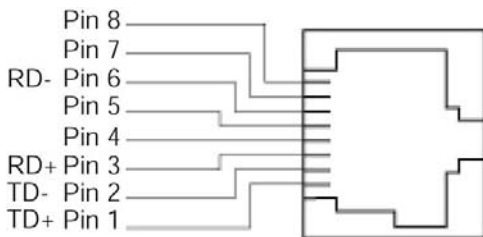
Pin	Regular Ports	Uplink port
1	Output Transmit Data +	Input Receive Data +
2	Output Transmit Data -	Input Receive Data -
3	Input Receive Data +	Output Transmit Data +
4	NC	NC
5	NC	NC
6	Input Receive Data -	Output Transmit Data -
7	NC	NC
8	NC	NC

The 100Base-FX Connections
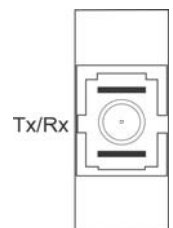
The fiber port pinouts

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.
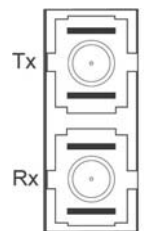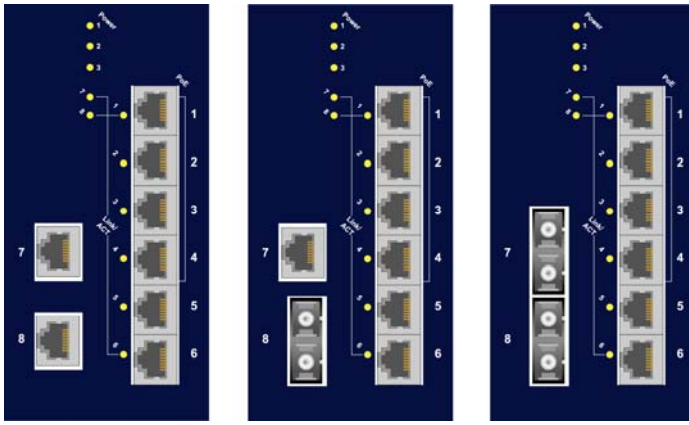
The WDM 100Base-FX Connections

The fiber port pinouts

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

Hardened PoE Ethernet Switch

The Port Status LEDs

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

Functional Description

- Meets IEC61000-6-2 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, WDM Single mode SC type.
- Supports 1024 MAC addresses. Provides 1M 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 100-240VAC external power supply.
- Operating voltage and Max. current consumption: 1.5A @ 48VDC. Power consumption: 72W Max.
- Operating temperature ranges from -10℃ to 60℃.
- Supports DIN-Rail, Panel, or Rack 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.