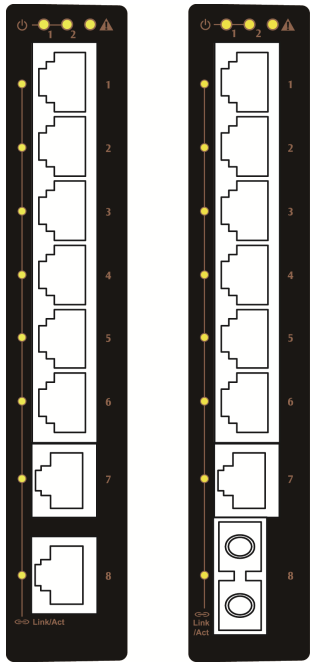
This quick start guide describes how to install and use the Hardened Ethernet Switch. Capable of operating at temperature extremes of -40°C to +75°C, this is the Switch of choice for harsh environments constrained by space.

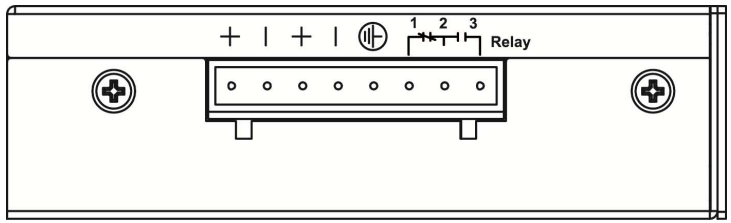
Physical Description

The Port Status LEDs



LED	State	Indication
⏻ **Power 1, 2 (Green)**	Steady	Power on.
	Off	Power off.
⚠ **Fault (Red)**	Steady	Relay starts alarm.
	Off	Relay non-alarm.
10/100TX or 100FX/BX Ports		
⇔ **Link/Act (Green)**	Steady	A valid network connection established.
	Blinking	Transmitting or receiving data. Act stands for Activity.
	Off	No link.

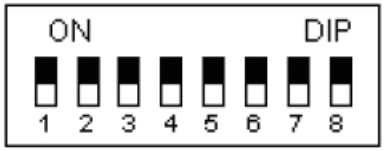
The Terminal Block and Power Inputs



Power Input Assignment			
Power 1	+	12~48VDC	Terminal Block
	−	Power Ground	
Power 2	+	12~48VDC	
	−	Power Ground	
⏚		Earth Ground	
Relay Output Rating			1A @ 250VAC

DC Terminal Block Power Input: The DC Terminal Block power input can be used to power up this Switch.

DIP Switch Settings



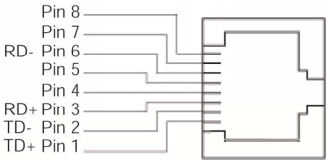
DIP No.	On	Off
1	Port 1 Alarm Enable.	Port 1 Alarm Disable.
2	Port 2 Alarm Enable.	Port 2 Alarm Disable.
3	Port 3 Alarm Enable.	Port 3 Alarm Disable.
4	Port 4 Alarm Enable.	Port 4 Alarm Disable.
5	Port 5 Alarm Enable.	Port 5 Alarm Disable.
6	Port 6 Alarm Enable.	Port 6 Alarm Disable.
7	Port 7 Alarm Enable.	Port 7 Alarm Disable.
8	Port 8 Alarm Enable.	Port 8 Alarm Disable.

The Ethernet Connectors

The 10/100Base-TX Connections

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

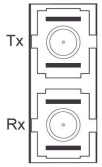
Pin	Regular Ports	Uplink port
1	Output Transmit Data +	Input Receive Data +
2	Output Transmit Data -	Input Receive Data -
3	Input Receive Data +	Output Transmit Data +
4	NC	NC
5	NC	NC
6	Input Receive Data -	Output Transmit Data -
7	NC	NC
8	NC	NC



The 100Base-FX Connections

The fiber port pinouts

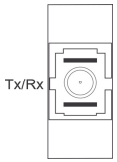
The Tx (transmit) port of device I is connected to the Rx (receive) port of device II, and the Rx (receive) port of device I to the Tx (transmit) port of device II.



The WDM 100Base-BX Connections

The fiber port pinouts

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



Functional Description

- Complies with EN61000-6-2 & EN61000-6-4 EMC Generic standard immunity for industrial environment.
- Supports IEEE802.3az 10Base-Te only. 10Base-T is not supported. 10Base-Te is fully interoperable with 10Base-T over 100m of class D (Category 5) or better cabling as specified in ISO/IEC 11801:1995.
- Supports 802.3az/802.3u/802.3x. Auto-negotiation: 10/100Mbps, Full/Half-duplex. Auto MDI/MDIX.
- 100Base-FX: Multi/Single mode SC or ST type. 100Base-BX: WDM Single mode SC type.
- Supports 1024 MAC addresses, 448K bits buffer memory.
- Supports IEEE802.3az Energy Efficient Ethernet (EEE).
- IEEE802.1Q VLAN Tag Based Priority, Class of Service.
- Output Queue Schedule Mode: Weighted Round Robin (WRR) with 2 priority queues.
- Power Supply: Redundant 12~48VDC Terminal Block power inputs.
- Power consumption: 2.47W Max.
- Provides reverse polarity protection.
- Supports normal close and normal open.
- Operating temperature ranges from -40°C to 75°C (-40°F to 167°F).
- Slim design with DIN-Rail mount installation.

Assembly, Startup, and Dismantling

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