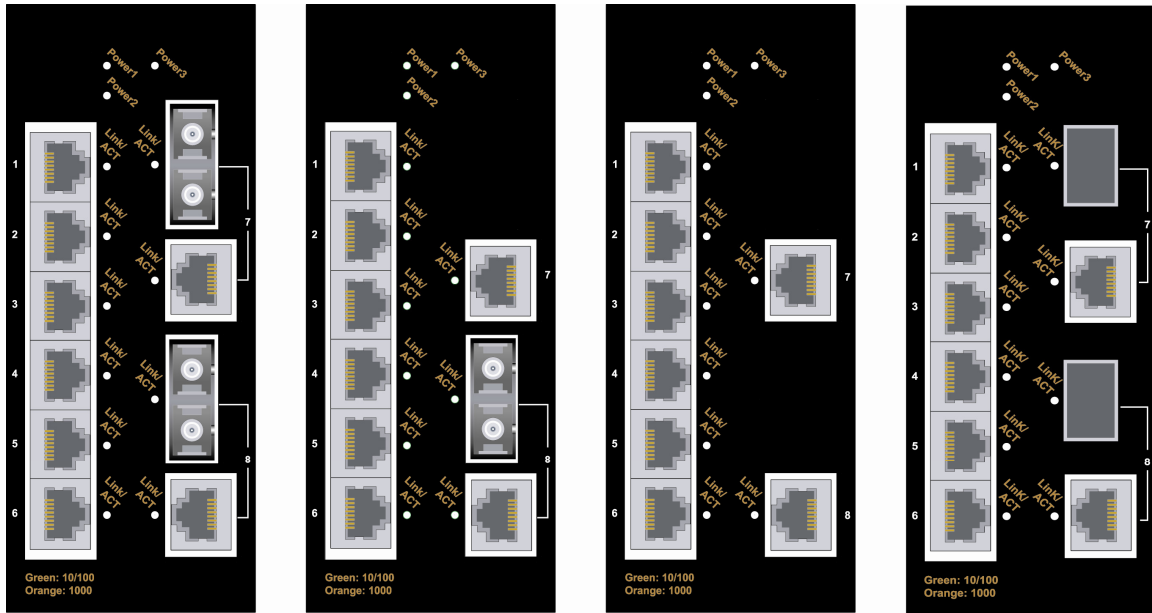


## Industrial Ethernet Switch

This quick start guide describes how to install and use the hardened Gigabit Ethernet Switch. Capable of operating at temperature extremes of -20°C to +60°C, this is the switch of choice for harsh environments constrained by space.

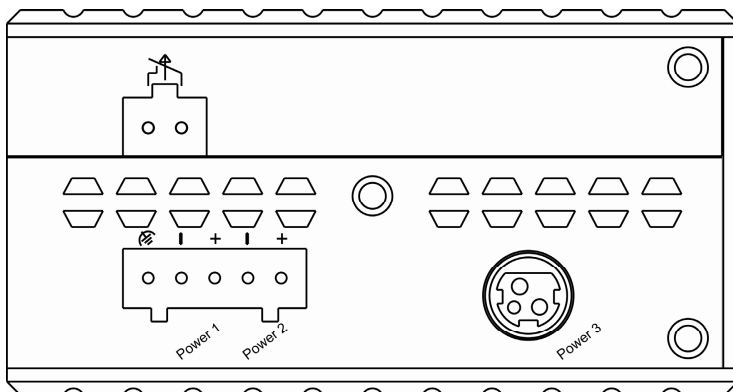
### Physical Description

#### The Port Status LEDs



| LED                        | State    | Indication  |
|----------------------------|----------|---|
| <b>10/100Base-TX</b>       |          |   |
| Link/ACT<br>(Green)        | Steady   | A valid network connection established.                     |
|                            | Flashing | Transmitting or receiving data.<br>ACT stands for ACTIVITY. |
| <b>1000Base-T/SX/LX/BX</b> |          |   |
| Link/ACT<br>(Orange)       | Steady   | A valid network connection established.                     |
|                            | Flashing | Transmitting or receiving data.<br>ACT stands for ACTIVITY. |

#### The Terminal Block and Power inputs



| Power Input Assignment |   |                |
|------------------------|---|----------------|
| Power3                 | 12VDC 3A  | DC Jack        |
| Power2                 | + 1.5A@24VDC(9-32VDC)   | Terminal Block |
|                        | - Power Ground  |                |
| Power1                 | + 1.5A@24VDC(9-32VDC)   |                |
|                        | - Power Ground  |                |
|                        | Earth Ground  |                |
| Relay Output Rating    |   | 30VDC, 1A      |
| Relay Alarm Assignment |   |                |
|                        | *Warning signal disable for following:<br>1. The relay contact closes if Power1 and Power2 are both failed but Power3 on.<br>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.

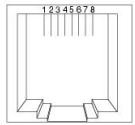
## Industrial Ethernet Switch

### The 1000Base-T and 1000Base-SX/LX/BX Connectors

#### The 1000Base-T Connections

The following lists the pinouts of 1000Base-T port.

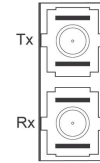
| Pin | Label |
|-----|-------|
| 1   | TP0+  |
| 2   | TP0-  |
| 3   | TP1+  |
| 4   | TP2+  |
| 5   | TP2-  |
| 6   | TP1-  |
| 7   | TP3+  |
| 8   | TP3-  |



#### The 1000Base-SX/LX Connections

The fiber port pinouts

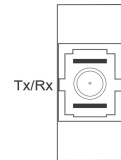
The Tx (transmit) port of device I is connected to the Rx (receive) port of device II, and the Rx (receive) port of device I to the Tx (transmit) port of device II.



#### The WDM 1000Base-BX Connections

The fiber port pinouts

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



#### The SFP Connections

The SFP socket for 1000Base fiber optic expansion.

Supports duplex LC connector on SFP with 1000Base-SX/LX/BX.



**For SFP expansion**

### Functional Description

- Meets EN61000-6-2 & EN61000-6-3 EMC Generic Standard Immunity for industrial environment.
- Supports IEEE802.3/802.3u/802.3ab/802.3z/802.3x/802.1p. Auto-negotiation: 10/100/1000Mbps, Full/Half-duplex; Auto MDI/MDIX.
- 1000Base-SX/LX: Multi mode and Single mode SC type. 1000Base-BX: WDM Single mode SC type.
- SFP socket for Gigabit fiber optic expansion. Supports duplex LC connector on SFP with 1000Base-SX/LX/BX.
- IEEE802.1p Queue Priority: Support 4 priority queues.
- Supports 8192 MAC addresses. Provides 1.125M bits buffer memory.
- Supports jumbo frame up to 9K Bytes.
- Alarms for power failure by relay output.
- Power Supplies: Redundant 9-32VDC Terminal Block power inputs and 12VDC DC JACK with 100-240VAC external power supply.
- Field Wiring Terminal: Use Copper Conductors Only, 60/75°C, 12-24 AWG torque value 7 lb-in.
- Operating voltage and Max. current consumption: 0.6A @ 12VDC, 0.3A @ 24VDC. Power consumption: 7.2W Max.
- Operating temperature ranges from -20°C to 60°C.
- 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.

