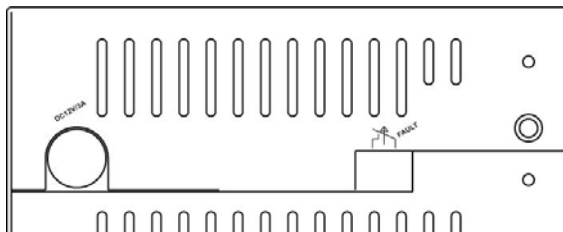
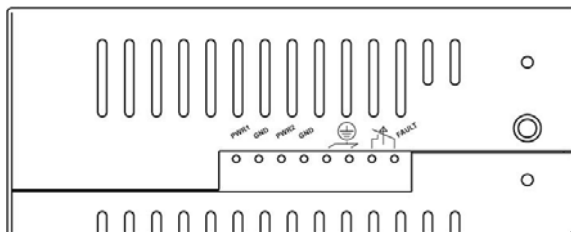


Hardened Managed Ethernet Switch

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

Physical Description

The Terminal Block and Power inputs



The Terminal Block	
PWR1	Power Input 1 (10 to 30VDC)
GND	Power Ground
PWR2	Power Input 2 (10 to 30VDC)
GND	Power Ground
	Earth Ground
	FAULT The relay opens if PWR1 or PWR2 fails (1A)

The DC Power Inputs	
12VDC DC JACK	
	FAULT The relay opens if PWR1 or PWR2 fails (1A)

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. You only need to have one power input connected to run the Switch.

The 10/100Base-TX, 10/100/1000Base-TX, 100Base-FX, and 1000Base-SX/LX 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 10/100/1000Base-TX Connections

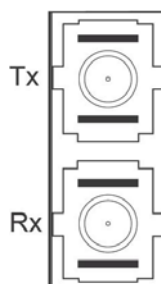
The following lists the pinouts of 10/100/1000Base-TX ports.

Pin	Ports
1	A+
2	A-
3	B+
4	C+
5	C-
6	B-
7	D+
8	D-

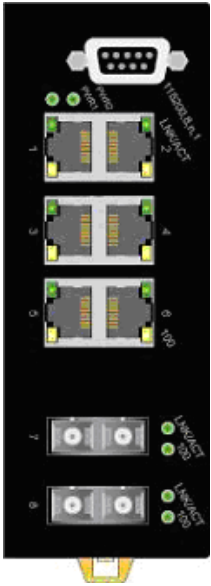
The 100Base-FX & 1000Base-SX/LX Connections

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 Port Status LEDs



LED	State	Indication
10/100TX or 100FX		
LNK/ACT (Green)	Steady	A valid network connection established. LNK stands for LINK.
	Flashing	Transmitting or receiving data. ACT stands for ACTIVITY.
100 (Yellow)	Steady	Light solid yellow for a port transferring at 100Mbps.
	Off	The port is transferring at 10Mbps If this LED is dark.
10/100/1000TX, 1000SX/LX		
LNK (Green)	Steady	Light solid green for a port transferring at 1000Mbps.
	Off	The port is not transferring at 1000Mbps If this LED is dark.
ACT (Yellow)	Flashing	Transmitting or receiving data. ACT stands for ACTIVITY.
	Off	Neither transmitting nor receiving data.

Functional Description

- Meets NEMA TS1/TS2 Environmental requirements such as temperature, shock, and vibration for traffic control equipment.
- Meets IEC61000-6-2 EMC Generic Standard Immunity for industrial environment.
- Manageable via SNMP, Web-based, Telnet, and RS-232 console port.
- Support 802.3/802.3u/802.3ab/802.3z/802.3x. Auto-negotiation: 10/100/1000Mbps, full/half-duplex; Auto MDI/MDIX.
- 100Base-FX: Multi mode SC or ST type; Single mode SC or ST type; WDM Single mode SC type.
- 1000Base-SX/LX: Multi mode SC type, Single mode SC type, or WDM Single mode SC type.
- Support 4096 MAC addresses. Provide 2M bits memory buffer.
- Alarms for power failure by relay output 1A @ 24VDC.
- Operating voltage and Max. current consumption: 1.54A @ 12VDC, 0.77A @ 24VDC. Power consumption: 18.48W Max.
- Power Supply: Redundant DC Terminal Block power inputs or 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.
- -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). UL1604 Industrial Control Equipment certified Maximum Surrounding Air Temperature @ 74°C (165°F).
- Supports DIN-Rail, Panel, or Rack Mounting installation.
- UL1604 Class I, Division 2 Classified for use in hazardous locations (applicable to versions with terminal block power option).
 - This equipment is suitable for use in Class I, Division 2, Groups A, B, C and D OR non-hazardous locations only.
 - WARNING – EXPLOSION HAZARD – Do not disconnect equipment unless power has been removed or the area is known to be non-hazardous.
 - WARNING – EXPLOSION HAZARD – Substitution of components may impair suitability for Class I, Division 2.

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.

