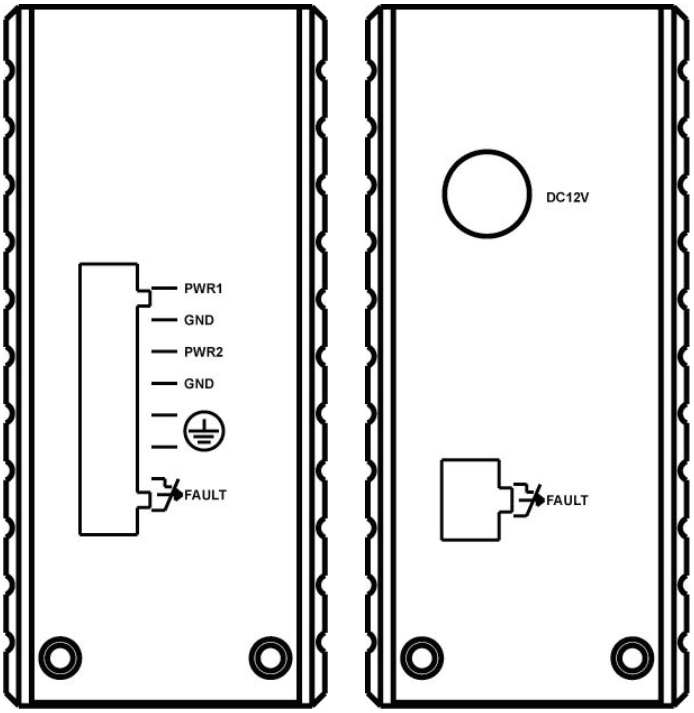
This quick start guide describes how to install and use the hardened media converter. This is the media converter of choice for harsh environments constrained by space.

Physical Description

The Terminal Block and Power inputs



Terminal Assignments	
PWR1	Power Input 0.19A@48VDC(10~48VDC)
GND	Power Ground
PWR2	Power Input 0.19A@48VDC(10~48VDC)
GND	Power Ground
⏚	Earth Ground
FAULT	1. The relay opens if PWR1 or PWR2 fails 2. The relay opens if Per Port Link is Broken (When Link Down Detection is Enabled)

DIP 1 2 3 4

1	LFP Enable	FIBER F. Mode	COPPER LNK_DOWN_Det. ON	FIBER LNK_DOWN_Det. ON
0	LFP Disable	FIBER Auto Mode	COPPER LNK_DOWN_Det. OFF	FIBER LNK_DOWN_Det. OFF

Power Input	
PWR	Power Input 0.76A@12VDC
FAULT	1. The relay opens if PWR1 or PWR2 fails 2. The relay opens if Per Port Link is Broken (When Link Down Detection is Enabled)

DIP 1 2 3 4

1	LFP Enable	FIBER F. Mode	COPPER LNK_DOWN_Det. ON	FIBER LNK_DOWN_Det. ON
0	LFP Disable	FIBER Auto Mode	COPPER LNK_DOWN_Det. OFF	FIBER LNK_DOWN_Det. OFF

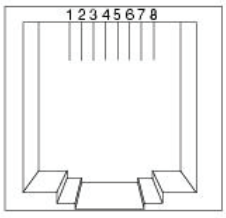
- DC Terminal Block Power Inputs: There are two pairs of power inputs can be used to power up this device. You need to have two power inputs connected to run the media converter, but the FAULT LED indicator will light up to remind that the power redundant system functions abnormal in case either PWR1 or PWR2 is dead. Media Converter, however, continues working normally even fault LED indicator lights up.
- DC JACK Power input: 12VDC.

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

The 1000Base-T Connections

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

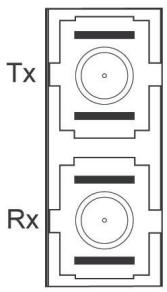
Pin	Label
1	TP0+
2	TP0-
3	TP1+
4	TP2+
5	TP2-
6	TP1-
7	TP3+
8	TP3-



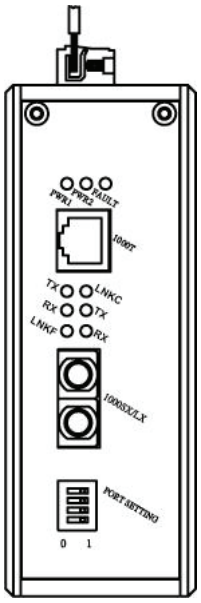
The 1000Base-SX/LX Connections

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 Port Status LEDs



LEDs	State	Indication
FAULT	Steady	Power redundant system or ports function abnormally
	Off	Power redundant system and ports function normally
PWR1 PWR2	Steady	Power on PWR stands for POWER
	Off	Power off
LNKC	Steady	A valid network connection established for copper port LNK stands for LINK
	Off	No valid network connection established for copper port
LNKF	Steady	A valid network connection established for fiber port LNK stands for LINK
	Off	No valid network connection established for fiber port
TX	Flashing	Transmitting data TX stands for TRANSMIT
	Off	No transmitting data
RX	Flashing	Receiving data RX stands for RECEIVE
	Off	No data being received

Functional Description

- Meets NEMA TS1/TS2 Environmental requirements: temperature, shock, and vibration for traffic control equipment.
- Meets IEC61000-6-2 EMC Generic Standard Immunity for industrial environment.
- Support 802.3ab/802.3z/802.3x. Auto-negotiation and Auto MDI/MDIX.
- 1000Base-SX/LX: Multi mode, Single mode, or WDM Single mode SC type.
- One DIP switch for configuring link-fault-pass-through, fiber auto negotiation, and port link down alarm.
- Alarms for power and port link failure by relay output. Relay contact rating with current 1.5A @ 24VDC, 0.5A @ 120VAC.
- Operating voltage and Max. current consumption: 0.76A @ 12VDC, 0.38A @ 24VDC, 0.19A @ 48VDC. Power consumption: 9.12W 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℃, 12-24 AWG torque value 7 lb-in.
- -40℃ to 75℃ (-40℉ to 167℉) operating temperature range. Tested for functional operation @ -40℃ to 85℃ (-40℉ to 185℉). UL1604 Industrial Control Equipment certified Maximum Surrounding Air Temperature @ 74℃ (165℉).
- 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 media converter on the DIN rail from above using the slot. Push the front of the media converter toward the mounting surface until it audibly snaps into place.
- Startup: Connect the supply voltage to start up the media converter via the terminal block (or DC JACK).
- Dismantling: Pull out the lower edge and then remove the media converter from the DIN rail.