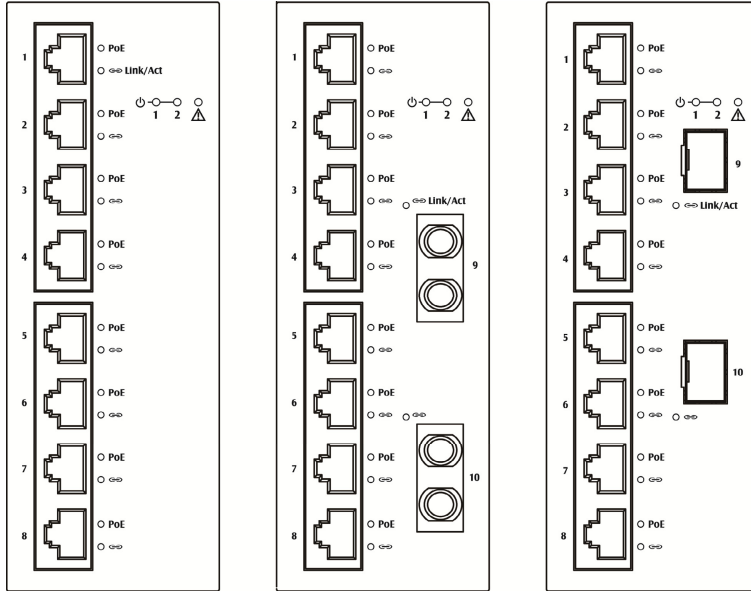This quick start guide describes how to install and use the Hardened PoE Gigabit Ethernet Switch. Capable of operating at temperature extremes of -40°C to +75°C, this is the Switch of choice for harsh environments constrained by space.

Physical Description

The Port Status LEDs

LED	State	Indication
⏻ **Power 1, 2 (Green)**	Steady	Power on.
	Off	Power off.
⚠ **Alarm (Red)**	Steady	Relay starts alarm.
	Off	Relay non-alarm.
Gigabit Ports		
⬳ **Link/Act (Green)**	Steady	A valid network connection established.
	Blinking	Transmitting or receiving data. Act stands for Activity.
	Off	No link.
PoE (Amber)	Steady	Powered Device is connected.
	Off	Powered Device is disconnected.
	Blinking	While Powered Device over 30W.

The Terminal Block and Power Inputs
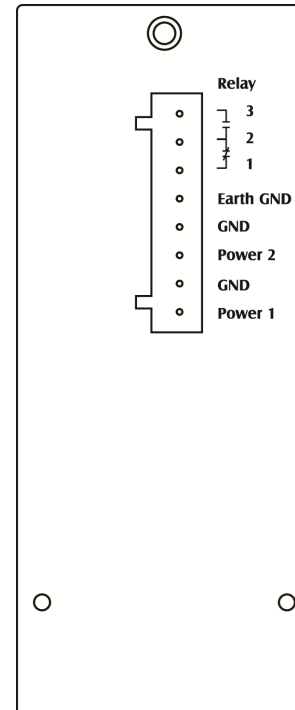
| Power Input Assignment			
Power1	+	18~57VDC	Terminal Block
	−	Power Ground	
Power2	+	18~57VDC	
	−	Power Ground	
⏚		Earth Ground	
Relay Output Rating			1A @ 250VAC

DIP Switch Settings
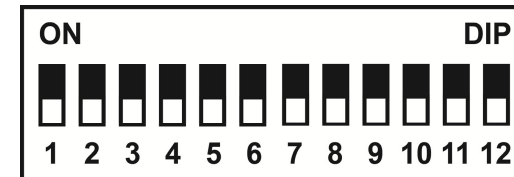
DIP No.	On	Off
1~10	Port 1~10 Alarm Enable.	Port 1~10 Alarm Disable.
11~12	N/A	N/A

W70G-EX4690AQ1

The 1000Base-TX (PoE) and Gigabit Ethernet Connectors

The 1000Base-TX (PoE) Connections

The following lists the pinouts of 1000Base-TX (PoE) ports.

Pin	Signal Name	Signal Definition
1	TP0+	Transmit and Receive Data 0 +
2	TP0−	Transmit and Receive Data 0 −
3	TP1+	Transmit and Receive Data 1 +
4	TP2+	Transmit and Receive Data 2 +
5	TP2−	Transmit and Receive Data 2 −
6	TP1−	Transmit and Receive Data 1 −
7	TP3+	Transmit and Receive Data 3 +
8	TP3−	Transmit and Receive Data 3 −

Pin	Label
1	TP0+
2	TP0-
3	TP1+
4	TP2+
5	TP2-
6	TP1-
7	TP3+
8	TP3-
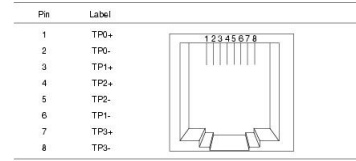
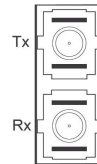### The SFP Socket Connections

The SFP socket for Gigabit fiber optic expansion.

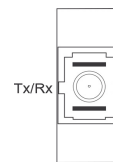### The 1000Base-SX/LX Connections

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.

Tx

Rx

The WDM 1000Base-BX Connections

The fiber port pinouts

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

Tx/Rx

Functional Description

- Complies with EN61000-6-2 & EN61000-6-4 EMC Generic standard immunity for industrial environment.
- Supports 802.3/802.3u/802.3ab/802.3z/802.3x. Auto-negotiation: 10/100/1000Mbps, Full/Half-duplex. Auto MDI/MDIX.
- 1000Base-SX/LX: Multi mode SC or ST type, Single mode SC type. 1000Base-BX: WDM Single mode SC type.
- Supports 8192 MAC addresses, 4M bits buffer memory.
- Supports IEEE802.3az Energy Efficient Ethernet (EEE).
- Supports Jumbo frame up to 9.6K Bytes.
- Port 1~8 support IEEE802.3at Power over Ethernet (PoE) Power Sourcing Equipment (PSE) and provide power up to 30W.
- Power consumption: 11.2W Max (Device only, without PoE).
- PoE power budget: 120W.
- Power Supply: Redundant 18~57VDC Terminal Block power inputs.
- Operating temperature ranges from -40°C to 75°C (-40°F to 167°F).
- 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.

W70G-EX4690AQ1