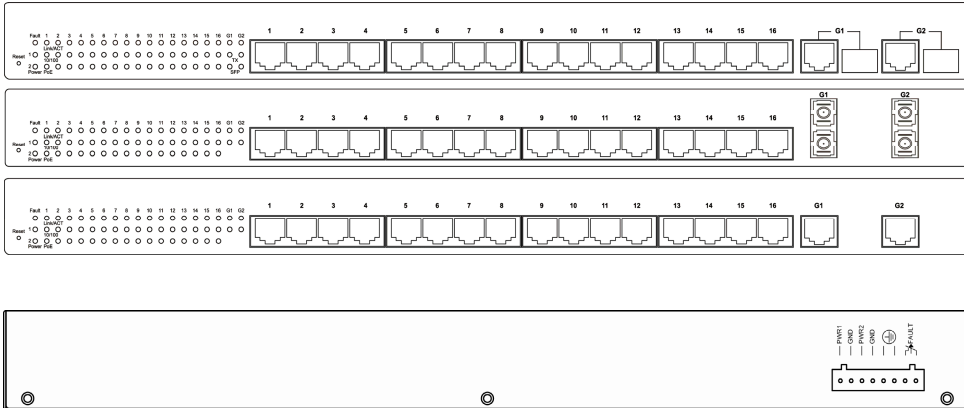This quick start guide describes how to install and use the Hardened Web-Smart PoE (Power over Ethernet) Ethernet Switch. Port and LED number will vary on different models. This user's manual will only use EX49162 to cover all models.

# Physical Description

## The Port Status LEDs and Power Inputs



| LED | State | Indication |
|---|---|---|
| Power1 Power2 | Steady | Power on. |
| | Off | Power off. |
| Fault | Steady | Power redundant system failure occurred. |
| | Off | Power redundant system failure is not occurred. |
| 10/100Base-TX | | |
| Link/ACT | Steady | A valid network connection established. |
| | Flashing | Transmitting or receiving data. ACT stands for ACTIVITY. |
| 10/100 | Steady | Valid port connection at 100Mbps. |
| | Off | Valid port connection at 10Mbps. |
| PoE | Steady | Powered device (PD) is connected. |
| | Off | Powered device (PD) is disconnected. |

| LED | State | Indication |
|---|---|---|
| Gigabit Ethernet | | |
| Link/ACT | Steady | A valid network connection established. |
| | Flashing | Transmitting or receiving data. ACT stands for ACTIVITY. |
| TX | Steady | A valid TX connection established. |
| | Off | No valid TX connection established. |
| SFP | Steady | A valid SFP connection established. |
| | Off | No valid SFP connection established. |

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.
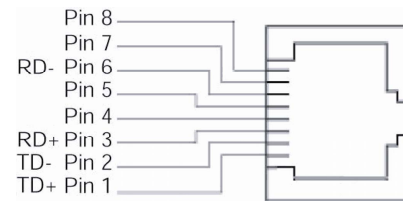
| Power Input Assignment | | |
|---|---|---|
| Power2 | + | 47-57VDC |
| | − | Power Ground |
| Power1 | + | 47-57VDC |
| | − | Power Ground |
| ⏚ | | Earth Ground |
| Relay Output Rating | | 1A @ 24VDC |

*(Power1, Power2 and Earth Ground form the Terminal Block.)*

## The 10/100Base-TX (PoE) and Gigabit Ethernet Connectors

### The 10/100Base-TX (PoE) Connections

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



| Pin | Signal Name | Signal Definition |
|---|---|---|
| 1 | TD+ | Output Transmit Data + |
| 2 | TD− | Output Transmit Data − |
| 3 | RD+ | Input Receive Data + |
| 4 | PoE | Positive (VCC+) |
| 5 | PoE | Positive (VCC+) |
| 6 | RD− | Input Receive Data − |
| 7 | PoE | Negative (VCC−) |
| 8 | PoE | Negative (VCC−) |

70G-EX49000Q1

## The 1000Base-T Connections

The following lists the pinouts of 1000Base-T ports.
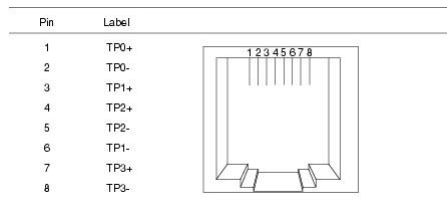
| Pin | Label |
|-----|-------|
| 1 | TP0+ |
| 2 | TP0- |
| 3 | TP1+ |
| 4 | TP2+ |
| 5 | TP2- |
| 6 | TP1- |
| 7 | TP3+ |
| 8 | TP3- |

| 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 - |

## The SFP Socket Connections

The SFP socket for Gigabit fiber optic expansion.

## The 1000Base-SX/LX Connections
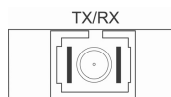
The fiber port pinouts

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.
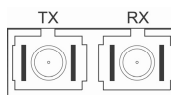
## The WDM 1000Base-BX Connections

The fiber port pinouts

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

# Functional Description

- Meets NEMA TS2 Environmental requirements such as temperature, shock, and vibration for traffic control equipment.
- Meets EN61000-6-2 & EN61000-6-4 EMC Generic Standard Immunity for industrial environment.
- Manageable via Web browser interface.
- Supports IEEE802.3at Power over Ethernet (PoE) Power Sourcing Equipment (PSE).
- Up to Max. 16 IEEE802.3at compliant PoE PSE (30W) ports.
- 2 Gigabit SFP combo ports.
- 1000Mbps-Full-duplex, 10/100Mbps-Full/Half-duplex. Auto-Negotiation, Auto-MDI/MDIX.
- Supports 4096 MAC addresses. Provides 2.25M bits memory buffer.
- Alarms for power and port link failure by relay output.
- Power Supply: Redundant 55VDC Terminal Block power inputs.
- Device power consumption: 15W Max. (without PoE). PoE power budget: 480W Max.
- -40℃ to 75℃ (-40℉ to 167℉) operating temperature range.
- Supports Rack Mounting installation.

# Web Configuration

- Login the switch:

  Specify the default IP address (192.168.1.10) of the switch in the web browser. A login window will be shown as below:
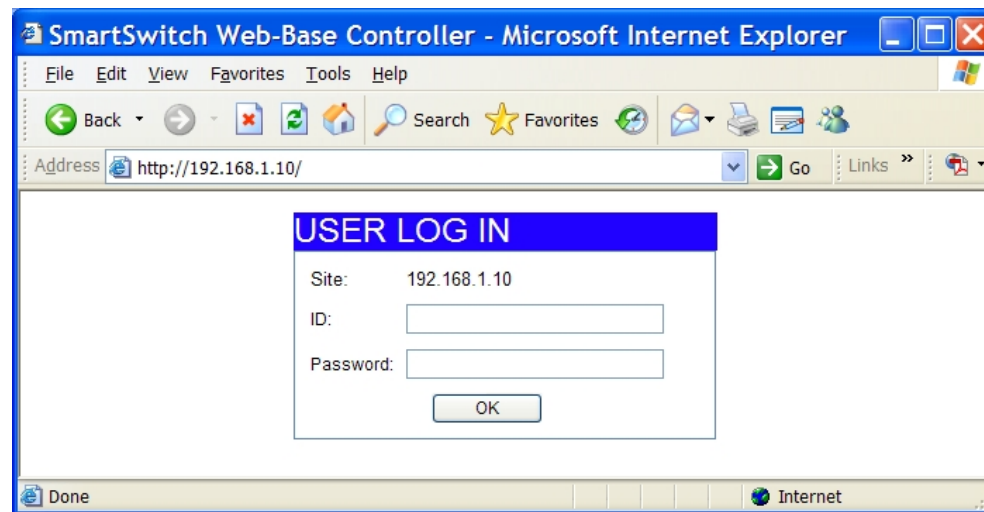


- Enter the factory default user name: admin. Enter the factory default password: admin.

  Then click on the "OK" button to log on to the switch.