

1 Unpacking

Open the carton and unpack the items. Your package should include:

- One EX75900 switch
- One RJ-45 console cable
- Rack-mounting hardware brackets

If any items are missing or damaged, notify your EtherWAN representative. If possible, save the carton and packing material in case you need to ship or store the switch in the future.

2 What Else You Need

- Appropriate cables for data ports. To prevent damage to the switch from electrical surges, it is recommended to use STP (Shielded twisted pair) cabling.
- Personal computer or laptop

3 Select a Location

- Desktop installations: Mount on a flat table or shelf surface.
- Rack installations: Use a 19-inch (48.3-centimeter) EIA standard equipment rack that is grounded and physically secure.
- Choose a dry area with ambient temperature between -40 and 75°C (-40 and 167ºF).
- Keep away from heat sources, sunlight, warm air exhausts, hot-air vents, and heaters.
- Be sure there is adequate airflow.



EX75900 Series | Hardened Managed PoE Ethernet Switch

4 Connect to the Data Ports

Depending on the model, your switch can have the following ports:

- 24 10/100/1000Base-TX PoE ports
- 4 1G SFP or 4 1G/10G SFP slots

10/100/1000BASE-TX Ports

Ports that support Power over Ethernet provide power to networked devices such as IP Phones, Wireless LAN Access Points, and IP security cameras. Total power budget is 720 Watts, 60 Watts per port.

1G/10G SFP Ports

SFP transceivers can be installed directly into SFP slots. Ensure that the same type of transceiver is used at both ends of the link and that the correct type of fiber cable is used.

5 Connect DC Power

The switch has two terminal block power inputs. Only one power input is required to operate the switch. However, redundant power supply functionality is supported. Input voltage is 52-57 VDC.

Relay Output Alarm

The switch provides relay output contacts for signaling of a user-defined power or port failure. The relay output can be connected to an alarm signaling device. Current is 0.5A at 48VDC.



3 Normal Open | 2 Ground | 1 Normal Close





Power-Up Sequence

- When the switch is powered up:

| 6 | 6 Front Panel LEDs | | | | | | | | | |
|---|----------------------------------|-------|--|--|--|--|--|--|--|--|
| | LED | Color | Status | | | | | | | |
| | Power 1 & 2 Green Link/Act Green | | On: Power on Off: Power off | | | | | | | |
| | | | On: Network connection established Flashing: Port sending or receiving data | | | | | | | |
| | ΡοΕ | Amber | ON = Powered Device is connected Off = Powered Device is disconnected | | | | | | | |
| | Alarm Red | | Link down or power down | | | | | | | |

7 Digital IO-Setting

Connecting the Digital Inputs The pin definitions for the digital input module are shown below. Each digital input consists of two contacts on the 5-pin connector located on the top of the switch. The inputs can be wired as either dry or wet contacts.

Dry Contacts:

[DI1-/GND] [DI2-/GND] Logic level 1: Close to GND Logic level 0: Open

Wet Contacts:

[DI1+/DI1-] [DI2+/DI2-] Logic level 1 (High): 13~30 Volts Logic level 0 (Low): 0~3 Volts

Configuring Digital Input Alarms Using the Web Interface

Located under the **Diagnostics** group, the Digital IO-Setting page allows for quick configuration and enabling of digital input and environmental alarms.

All Link/ACT LEDs blink momentarily.

The Power LED light goes ON.

Booting \rightarrow The Alarm LED goes ON

System ready → The Alarm LED goes off



| DI Board Global Setting | | | | | | | | | |
|---|----------------------|--|----------------------------|-----|---------------------|-----------|--|---------|--|
| Digital Input/Sensor Monitoring | | | Enable 🔻 | | | Enabled | | | |
| Monitoring Interval | | | 1~65535 | | | 1 seconds | | | |
| Update Setti | | | | | | | | Setting | |
| | | | | | | | | | |
| Source Input | e Description Status | | Alert | | Min Interval (sec.) | | | | |
| Digital Input 1 | | | Low(0-3V) /High(13-30V) | Low | Enabl | e/High 🔻 | | 5 | |
| Digital Input 2 | | | Low(0-3V) /High(13-30V) | Low | Enabl | e/High 🔻 | | 5 | |
| "Min Interval" range is 0 to 3600. Set "Min Interval" to 0 to disable traps on the same alert. | | | | | | | | | |
| Digital Output | | | Status | | | Alert | | | |

| Digital Output | Status | Alert | | | |
|------------------|------------------------|-------|-------------------|--|--|
| Digital Output 1 | Normal(0) /Abnormal(1) | 0 | Digital input 1 🔹 | | |
| Digital Output 2 | Normal(0) /Abnormal(1) | 0 | Digital input 2 🔻 | | |
| | | | Update Setting | | |

To enable digital input alarms globally:

1. Choose Enable from the drop down menu in the Set State field.

2. Click on the Update Setting button to the right of the field.

To enable specific digital input alarms:

1. Enter a name or description of the alarm in the **Description** field. 2. In the Alert field, choose Enable/High from the drop-down menu if you want the alarm to trigger in an occurrence of high voltage (wet contact), or Open state (dry contact). Choose Enable/Low if you want the alarm to trigger in an occurrence of low voltage (wet contact), or Closed to ground state (dry contact). 3. To set alarms for temperature and humidity, enter the threshold value in the field provided, and select **Enable** from the drop down menu at the right. 4. Click on the **Update Setting** button at the bottom right to put the new settings into effect. Then navigate to the Email configuration page.

8 Console Configuration

Connect to the switch console by connecting the DB-9 cable to the console port of the switch and to the serial port of the computer running a terminal emulation application (such as HyperTerminal or Putty).

Configuration settings of the terminal-emulation program: Baud rate: 115,200bps, Data bits: 8, Parity: none, Stop bit: 1, Flow control: none. The default login name is "root," no password.

9 Web Configuration

Connect to the switch using either one of the RJ45 ports on the front, or the console port on the rear of the device.

Log in to the switch by launching a web browser and entering 192.168.1.10 in the address bar. Enter the default login ID: root (no password) and click "Login."

10 Copy Configuration to USB

The switch is equipped with one USB port (Type A connector) for configuration file and syslog backup. The USB port can be used to save the configuration and Syslog to a (FAT32) USB storage device.

Plug the device into the USB port, and use the "Save Configuration" command in the web interface, or "copy running-config startupconfig" in the CLI.

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11 Safety Information

This equipment is intended to be used in a restricted access location and by qualified personnel. This equipment is not suitable for use in locations where children are likely to be present.

Pluggable optical modules and direct-attach cables shall meet the following regulatory requirements:

- UL and/or CSA registered component for North America
- Class 1 Laser Product

• FCC 21 CFR Chapter 1, Sub-chapter J in accordance with FDA & CDRH requirements

• IEC/EN 60825-1:2014, IEC/EN 60825-2:2004+A1+A2 or later, European Standard

(A) Elevated Operating Ambient - If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient. Therefore, consideration should be given to installing the equipment in an environment compatible with the maximum ambient temperature (Tma).

B) Mechanical Loading - Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to uneven mechanical loading. C) Circuit Overloading - Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of the circuits might have on overcurrent protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.

D) Reliable Earthing - Reliable earthing of rack-mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit (e.g. use of power strips). Do not disable the power cord grounding plug. The grounding plug is an

important safety feature.



Hazardous voltages may occur within this unit when connected to all power supplies.



Plug the power cord into a grounded (earthed) electrical outlet that is easily accessible at all times.

Les matériels sont destinés à être installés dans des EMPLACEMENTS À ACCÈS **RESTREINT.**



Power wiring information:

The rating of the power wire used must be at least 105°C.

USE COPPER CONDUCTORS ONLY.

If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

WARNING – Explosion hazard. Do not disconnect the terminal block while the circuit is live or unless the area is known to be free of ignitable concentrations. For repair or maintenance needs, contact EtherWAN directly.

Informations de câblage d'alimentation: Le calibre du fil d'alimentation utilisé doit être d'au moins 105°C. DESTINÉ À ÊTRE UTILISÉ AVEC DES CONDUCTEURS EN CUIVRE SEULEMENT. Si la méthode d'utilisation de l'équipement diffère de celle décrite par le fabricant, la protection assurée par l'équipement risque d'être altérée. Contactez-nous pour l'entretien ou la reparation.

Manufacturer information: **EtherWAN Systems, Inc.** 33F, No. 93, Sec. 1, Xintai 5th Rd., Xizhi Dist., New Taipei City, 221 Taiwan

The full product manual can be downloaded from: www.etherwan.com

