EX73900E Series Hardened Managed Ethernet Switch

Installation Guide

EtherWAN

1 Unpacking

Unpack the items. Your package should include:

➢ One **EX73900E** hardened managed switch
➢ One RJ-45 console cable

If items are missing or damaged, notify your EtherWAN representative. Keep the carton and packing material. The full product manual can be downloaded from:

https://www.etherwan.com

2 What Else You Need

➢ Appropriate cables for data ports
➢ Personal computer or laptop
➢ Appropriate SFP modules for SFP ports

3 Select a Location

➢ Installations: Desktop, Wall-mount, DIN-Rail mount.
➢ Select a power source within 6 feet (1.8 meters).
➢ Choose a dry area with ambient temperature between -40 and 75℃ (-40 and 167℉).
➢ Be sure there is adequate airflow.

4 Connect to the Data Ports

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

| EX73922E-0VB	8-port 10/100/1000BASE-T + 2-port 100/1000BASE SFP Hardened Managed Ethernet Switch
EX73924E-0VB	8-port 10/100/1000BASE-T + 4-port 100/1000 BASE SFP Hardened Managed Ethernet Switch
EX73934E-0VB	12-port 10/100/1000BASE-T + 4-port 100/1000 BASE SFP Hardened Managed Ethernet Switch
EX73922E-0VB-CC	8-port 10/100/1000BASE-T + 2-port 100/1000BASE SFP Hardened Managed Ethernet Switch with conformal coating
EX73924E-0VB-CC	8-port 10/100/1000BASE-T + 4-port 100/1000BASE SFP Hardened Managed Ethernet Switch with conformal coating
EX73934E-0VB-CC	12-port 10/100/1000BASE-T + 4-port 100/1000BASE SFP Hardened Managed Ethernet Switch with conformal coating

5 Apply Power

The switch has two pairs of power inputs.

Only one power input is required to operate the switch. However, redundant power supply functionality is supported.

Note: Use qualified power supply by SELV or double insulation of UL60950 or UL61010-1 or UL61010-2-201 standards.

Terminal Block

The switch provides two power inputs on a terminal block with nominal power of 24VDC. The terminal block has 5 terminal posts.
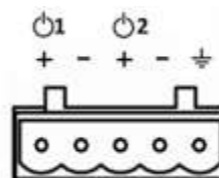
Pin		Description
Power 1	+	12-48VDC
	−	Power Ground
Power 2	+	12-48VDC
	-	Power Ground
⏚		Earth Terminal
Relay Output Rating		0.6A @30VDC

Relay Output Alarm

The switch provides two relay output contacts. Relay 1 is for signaling of a user-defined power, port, or ring failure. Relay 2 signals actions from one of the digital inputs. The relay outputs can be connected to an alarm signaling device. Current is 0.6A@30VDC.
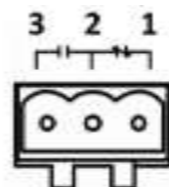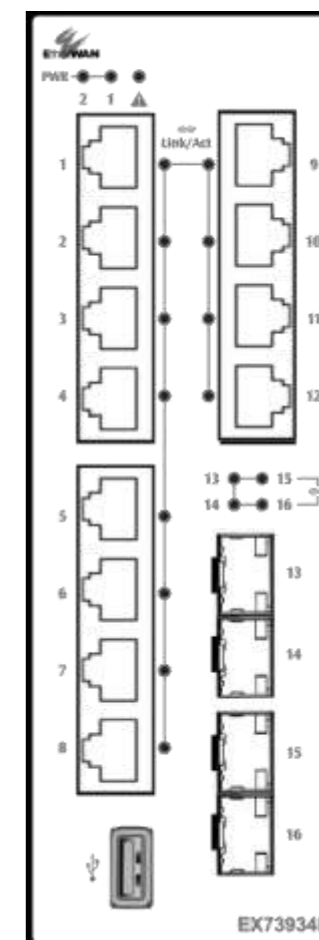

3 Normal Open | 2 Ground | 1 Normal close

Power-Up Sequence

When you apply power:

➢ All **Link/ACT** LEDs blink momentarily.
➢ The **Power 1** LED goes ON.
➢ LEDs for every port connected to a device flash, as the switch conducts a brief Power On Self-Test (POST).

6 Front Panel LEDs

LED	Color	Status
Power 1 & 2	Green	On: Power on / Off: Power off
Link/Act	Green	On: Network connection established / Flashing: Port sending or receiving data
Alarm	Red	Link down or power down

Power-Up Sequence

When you apply power:

➢ All **Link/ACT** LEDs blink momentarily.
➢ The **Power 1** LED goes ON.
➢ LEDs for every port connected to a device flash, as the switch conducts a brief Power On Self-Test (POST).

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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 back panel 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): open

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.

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. This will display in any emails sent if the alarm is triggered.
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

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." The system information screen will display.

10   USB Port

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. Use the "Export Logs to USB" command in the web interface, or "export logs" in the CLI.

11   Other information

DIN-Rail 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.
➢ Dismantling: Pull out the lower edge and then remove the Switch from the DIN rail.
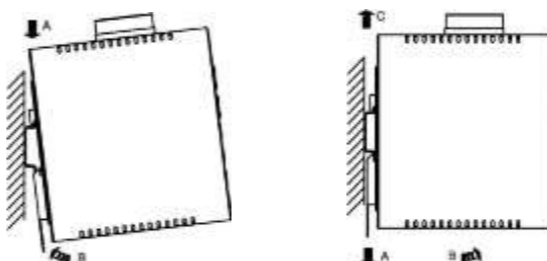
Power wiring information:

Use cable type - AWG (American Wire Gauge) 18-24 and corresponding pin type cable terminals.

Using torque value 1.7 lb-in, do not use excessive force when fixing wiring.

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

➢ Label clean up:
  Indoor use and pollution degree II, it must be wiped with a dry cloth to clean up the labelling.
➢ If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.
➢ The Ethernet switch shall be mounted in the Industrial Control Panel and ambient temperature is not exceed 75 degree C

➢ Altitude up to 2000 m
➢ Humidity range (Operational): 5% to 95%, non-condensation

Manufacturer information:

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