

A grayscale photograph of an industrial facility, possibly a factory or power plant, with long rows of machinery and overhead structures.

# ROCKETLINX ES7506

*Industrial 6-Port Managed PoE Switch*

A grayscale photograph of a city skyline with several tall skyscrapers.

## QUICK INSTALLATION GUIDE

A grayscale photograph of several wind turbines against a cloudy sky.

2000528 Rev D | Release Date - January, 2014

# INTRODUCTION

The RocketLinx 7506 is designed for industrial PoE applications where the power source is not conveniently located, such as IP surveillance or wireless access points.

See the Control website for complete product specifications.

# INSTALLATION OVERVIEW

You can use the following overview to install the ES7506. If you need more detailed installation and configuration information, you can refer to the *RocketLinx ES7506 User Guide*, which is available on the RocketLinx CD or you can download the latest version.

## Wiring the Power Inputs

The ES7506 provides redundant power, reverse polarity protection, and accepts a positive or negative power source but PW1 and PW2 must apply to the same mode. The power supplies should be UL Listed with a minimum output rating of 24-55VDC and at 2.5A.

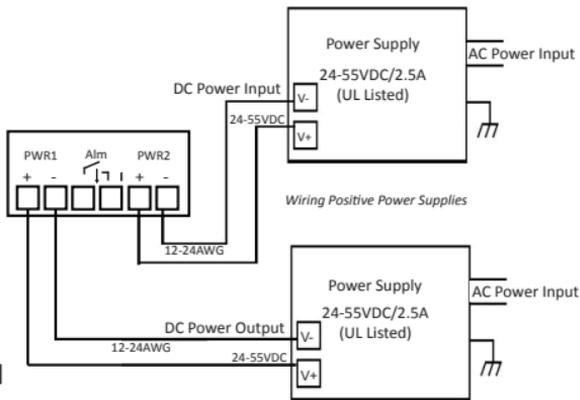
Electrical Specifications		Values
Power Input Voltage	IEEE 802.3af Standard, Manual	48 (48-57VDC)
	IEEE 802.3af Ultra	55 (55-57VDC)
PWR1/PWR2	Forced 15.4W	48 (48-57VDC)
	Forced 30W	55 (55-57VDC)
PoE Output Voltage	IEEE 802.3af Standard, Manual	44-57V
	IEEE 802.3af Ultra	50-57V
	Forced	44-57V
Maximum PoE Power/Port	IEEE 802.3af Standard, Manual	15.4W
	IEEE 802.3af Ultra, Forced	30W
Total Power Budget	Maximum	Up to 100 W
Power Consumption	Maximum	8W without PD load

1. Insert the positive and negative wires into PW+ and PW- contacts (PW1 and PW2). You can connect a single power supply or two power supplies depending on your requirements.
2. If both power inputs are connected, the ES7506 is powered from the highest connected voltage. The unit can be configured to signal an alarm for loss of power in either PW1 or PW2.
3. Tighten the wire-clamp screws to prevent the wires from being loosened.

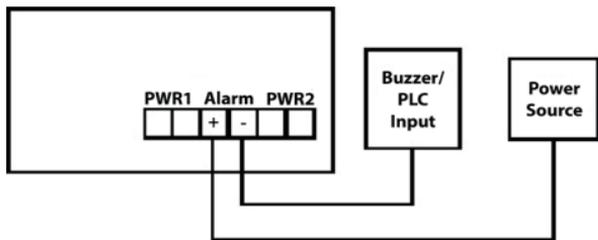
Power should be disconnected from the power supply before connecting it to the switch. Otherwise, your screwdriver blade can inadvertently short your terminal connections to the grounded enclosure.

### Wiring the Alarm Relay Output

The alarm relay output or digital output (DO) contacts are on the terminal block connector on the side of the ES7506. The power supply should be UL Listed with a minimum output rating of 2.5A at 24-55VDC.



The relay contacts are energized (open) for normal operation and close under faulty conditions. Faulty conditions can include power failure, Ethernet port link break, or other predefined events configurable in the ES7506 user interface. To activate the alarm relay output function, refer to the *RocketLinx ES7506 User Guide*.



## Grounding the E7506

Wire the earth ground to ensure the system is not damaged by noise or any electrical shock, we recommend that you make a direct connection between the ES7506 and earth ground.

Using a screw driver, loosen the earth ground screw on the side of the ES7506 and then tighten the screw after the earth ground wire is connected.

## Mounting the ES7506

Use the appropriate procedure to mount the ES7506 on the wall or a DIN rail.

### Attaching the ES7506 to the Wall



Use the hook holes located at the corners of the wall-mount plate to mount the ES7506.

### DIN Rail Mounting



Two DIN rail clips and four screws were shipped with the ES7506. Use the screws to attach the DIN rail clip to the wall-mount plate.

## Connecting RJ45 Ports

Connect one end of an Ethernet cable into the Ethernet port of the ES7506 and the other end to the attached networking device. The Ethernet ports support 10/100Mbps half/full-duplex. All ports auto-detect the signal from connected devices to negotiate the link speed and duplex mode. Auto MDI/MDIX allows users to connect another switch, hub, or workstation without changing straight through or crossover cable.

Link/Act LEDs are lit to indicate traffic and link status, see the LEDs subsection for more information.

### 10/100BASE-TX Cabling



Always make sure that the cables between the switches and attached devices (for example, switch, hub, or workstation) are less than 100 meters (328 feet).

- **10BASE-T:** Category 3, 4, or 5 cable
- **100BASE-TX:** Category 5 cable
- **IEEE 802.3af:** Category 5 cable

## PROGRAMMING THE IP ADDRESS

Configure the IP address using one of the following methods:

- PortVision DX (available on the RocketLinx CD shipped with the product)
- Web browser
- Telnet
- Command Line Interface (CLI) using the RS-232 console cable

The easiest way to configure a static IP address for your network in the ES7506 is to use a Windows host and PortVision DX (see below). For information about using other configuration methods, refer to the *RocketLinx ES7506 User Guide*.

**Note:** *Optionally, you can use NetVision if you are accustomed to using NetVision. PortVision DX is replacing NetVision. NetVision is not documented in the RocketLinx ES7506 User Guide.*

The following procedure uses PortVision DX to program network settings.

1. Install PortVision DX on a host system with a Windows operating system. If you need assistance installing PortVision DX, see the *RocketLinx ES7506 User Guide*.
2. Start PortVision DX. PortVision DX can be started from **Start --> All Programs --> Control --> PortVision DX**.
3. Click the **Scan** button.
4. Select the Control product families that you want to locate and click the **Scan** button.

*(cont. on page 5)*

10/100BASE-TX PoE (Alternative B)	
1	RX+
2	RX-
3	TX+
4,5	Vport+
6	TX-
7,8	Vport-

(cont. from page 4)

5. Right-click the ES7506 in the *Device List* pane (lower) that you want to configure and click **Properties**.
6. Enter a user-friendly Device Name.
7. Optionally, enter the ES7506 serial number, which displays a friendly device name in the *Device List* pane on the main page.
8. Select **DHCP IP** or **Static IP** for the IP Mode.
  - If you select **DHCP IP**, go to Step 9.
  - If you select **Static IP**, enter an IP address, Subnet Mask, and Default Gateway value for your network.
9. Optionally, select the appropriate **Network Topology**, which is an informational field.
10. Click the **Apply Changes** button.
11. Click **Close** to return to the main screen.

You are now ready to configure the ES7506 features.

## LED INDICATORS

You can also view the LEDs for the ES7506 through the web interface using the *Device Front Panel* page.

LEDs	LED On	LED Blinking	LED Off
<b>Alm (Alarm)</b>	Alarm activated or port link down	Not applicable	Alarm not activated
<b>PW1/ PW2</b>	Green: Power	Not applicable	No power
<b>R.M. (Ring Master)</b>	Green: Working as a Ring Master	Amber: Ring failed	Ring function disabled
<b>PoE 1-4</b>	Amber: PoE powering	Blinking: PoE Detect Blinking fast: PoE powering failure	PoE disabled: power output over current, a cable short, or PoE is disabled for that port
<b>LNK/ACT 1-6</b>	Port link up	Active connection	Port link down or port not connected

# FEATURE CONFIGURATION

The ES7506 provides both in-band and out-band configuration methods:

**Out-band management** means that you configure the ES7506 using the RS-232 console cable and the Command Line Interface (CLI) to access the ES7506 without attaching an admin PC to the network. You can also use out-band management, if you lost the network connection to the ES7506.

**In-band management** means that you connect remotely using the ES7506 IP address through the network. You can remotely connect with the ES7506 Java applet web interface or a Telnet console and the CLI.

The following procedure uses a web browser to configure ES7506 features. Refer to the *RocketLinx ES7506 User Guide* for other configuration methods.

1. If necessary, install the latest version of the Java Runtime Environment, which is required to run the web management interface.
2. Open a web browser and enter the IP address of the ES7506.
3. Click **Run** when Java prompts you to run the applet.
4. Enter **admin** for both the user name and the password when prompted.
5. Use the web interface to configure your device as needed for your network.

You can use the help system or the *RocketLinx ES7506 User Guide* for information about configuring ES7506 features.



## CONTROL CUSTOMER SERVICE

You can use one of the following methods to contact Control.

Contact Method	Web Address or Phone Number
Support	<a href="http://www.control.com/support">http://www.control.com/support</a>
Downloads	<a href="ftp://ftp.control.com/html/ES7506_main.htm">ftp://ftp.control.com/html/ES7506_main.htm</a>
Website	<a href="http://www.control.com">http://www.control.com</a>
Phone	+1 763.957.6000

