

INTRODUCTION

The RocketLinX ES9528 and ES9528-XT are rack mount 24+4G managed industrial Ethernet switches that are equipped with 24 10/100 BASE-TX ports plus four Gigabit RJ45 / mini GBIC combo ports. This special design is perfect for control rooms where high-port density and performance are required.

The four Gigabit combo port design allows 10/100/1000BASE-TX, and the SFP ports accept all types of Gigabit SFP transceivers, including Gigabit SX, LX, LHX, ZX, and XD for several connection types and distances.

See the Control web site for detailed product specifications for your model. The RocketLinX ES9528 and ES9528-XT are referred to as the ES9528 in this guide.

INSTALLATION OVERVIEW

You can use the following overview to install the ES9528. If you need more information, you can refer to the *RocketLinX ES9528/ES9528-XT User Guide*, which contains installation and configuration information to install the ES9528.

Connect the Power and Ground

Connect the power cord to the AC power input connector. The available AC power input range is from 90 to 264VAC.

Mount the ES9528 into a Rack

Use the following procedure to mount the ES9528 into a rack.

1. Ground the ES9528 using the earth ground screw on the back of the unit. Loosen the ground screw with a screwdriver; then tighten the screw after earth ground wire is connected.
2. Attach the brackets to the ES9528 by using the screws provided in the rack mount kit.
3. Mount the ES9528 in a 19-inch rack by using four rack mounting screws provided in the kit.

Note: *When installing multiple switches in high temperature environments, reserve 0.5U-1U of free space between the switches.*

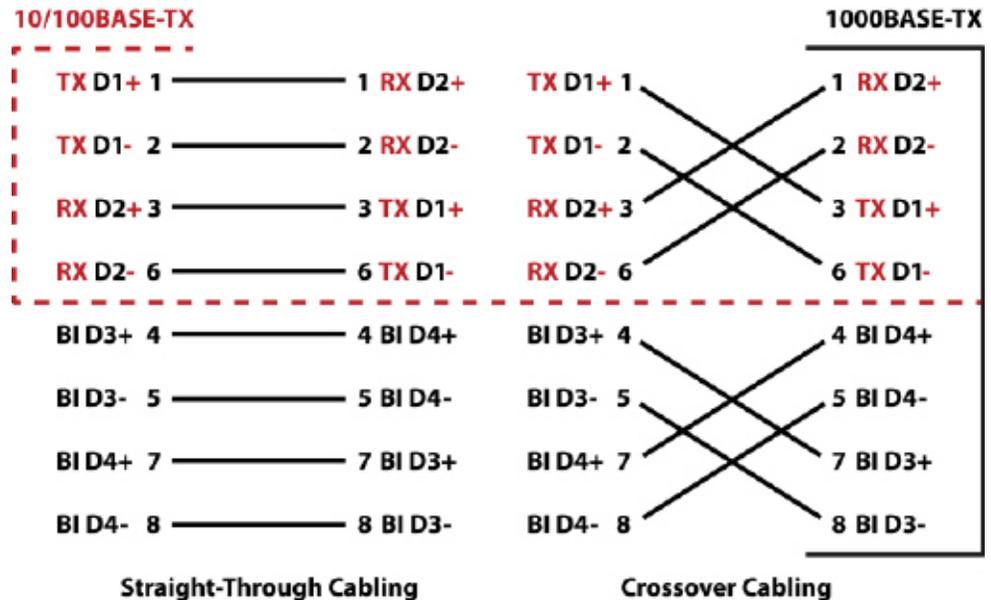
Temperature: Verify that the rack environment temperature conforms to the specified operating temperature range.

Mechanical Loading: Do not place any equipment on top of the switch. In a high vibration environment, additional rack mounting protection is necessary.

Connect the Ethernet Ports

Connect one end of an Ethernet cable into the Ethernet port of the ES9528 and the other end to the attached networking device.

Ports 1-24 support 10/100BASE-TX half/full-duplex. All RJ45 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.

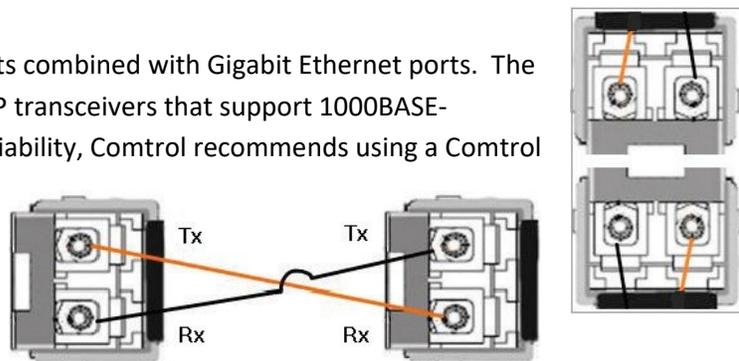


Ports 25 through 28 are RJ45/SFP combo ports. The RJ45 ports support 10/100/1000BASE-TX and the SFP ports support 1000BASE-TX. When the SFP is active and installed on a combo port, the corresponding combo RJ45 port is deactivated. For example, if an SFP is installed and active on the SFP25 port, the corresponding RJ45 Port 25 becomes inactive.

Connect the SFPs

The ES9528 equips four Gigabit SFP ports combined with Gigabit Ethernet ports. The SFP ports accept standard mini GBIC SFP transceivers that support 1000BASE-SX/LX/LHX/XD/ZX. To ensure system reliability, Control recommends using a Control certified Gigabit SFP transceiver.

100BASE-FX is not supported in Gigabit combo ports.



1. Plug the SFP transceiver into the SFP fiber transceiver.
2. Connect the transmit channel to the receive channel at each end.
3. Check the direction/angle of the fiber transceiver and the fiber cable.

Note: This is a Class 1 Laser/LED product. Do not stare at the Laser/LED beam. The SFP port does not function until the fiber cable is linked to another active device. The SFP and corresponding RJ45 ports work in an exclusive mode. Traffic sent or received through the SFP module will have priority, thus no traffic will be sent or received over the corresponding RJ45 connection. To use the RJ45 connection, remove the corresponding SFP.

LED Name	LED On	LED Blinking	LED Off
PWR (Power)	Green: Power available		No power
R.M. (Ring Master)	Green: Working Ring Master	Amber blinking: Ring failed	Ring function not enabled
LEDs 1-24 Link/Act		Green: 100M Yellow: 10M	Not connected
Duplex	Green: Full-Duplex		Half-Duplex
LEDs 25-28 Link/Act		Green: 1000M Yellow: 10M or 100M	Not connected
Duplex	Green: Full-Duplex		Half-Duplex
SFP Link State	Green: On Gray: Plugged in but not linked up		Not connected

PROGRAMMING THE IP ADDRESS

Configure the IP address using one of the following methods:

- PortVision DX (<http://downloads.comtrol.com>)
- 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 ES9528 is to use a Windows host and PortVision DX (see below). For information about using other configuration methods, refer to the *RocketLinx ES9528/ES9528-XT 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 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.
5. Right-click the ES9528 in the Device List pane (lower) that you want to configure and click Properties.

6. Optionally, enter a user-friendly Device name, which displays a friendly device name in the Device List pane on the main page.
7. Optionally, enter the ES9528 serial number.
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.
12. You are now ready to configure the ES9528 features.

FEATURE CONFIGURATION

The ES9528 provides both in-band and out-band configuration methods:

- Out-band management means that you configure the ES9528 using the RS-232 console cable and the Command Line Interface (CLI) to access the ES9528 without attaching an admin PC to the network. You can also use out-bound management, if you lost the network connection to the ES9528.
- In-band management means that you connect remotely using the ES9528 IP address through the network. You can remotely connect with the ES9528 web interface or a Telnet console and the CLI.

The following procedure uses a web browser to configure ES9528 features. Refer to the *RocketLinx ES9528/ES9528-XT User Guide* for other configuration methods.

1. Open a web browser and enter the IP address of the ES9528.
2. Enter admin for both the user name and the password when prompted.
3. Use the web interface to configure your device as needed for your network.

You can use the help system or the *RocketLinx ES9528/ES9528-XT User Guide* for information about configuring ES9528 features.

CONTROL CUSTOMER SERVICE

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

Contact Method	Web Address or Phone Number
Support	http://www.comtrol.com/support
Downloads	ftp://ftp.comtrol.com/html/ES9528_main.htm
Website	http://www.comtrol.com
Phone	+1 763.957.6000