LTE Connectivity Kit Quick Start Guide

WHAT'S IN THE BOX

Sierra Wireless ES450
LTE Cellular Gateway

AC Power Supply

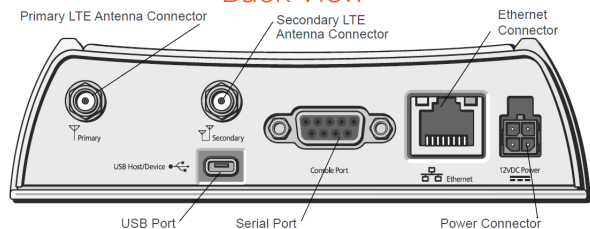RF Antennas (2)

For Ethernet Models:
RJ45 to RJ45 CAT5

1. HARDWARE OVERVIEW

Front View

LEDs
Power
Activity
Signal
Network
AirLink® ES450
Reset
Reset Button

Back View

Primary LTE Antenna Connector
Secondary LTE Antenna Connector
Ethernet Connector
Primary
Secondary
USB Host/Device
Console Port
Ethernet
12VDC Power
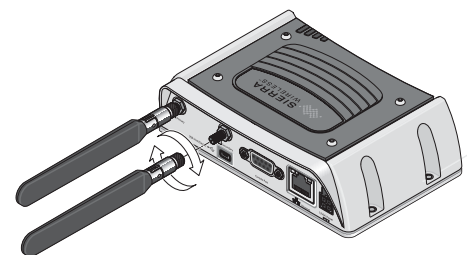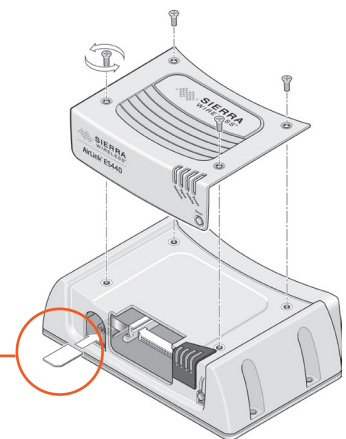USB Port
Serial Port
Power Connector

The Ethernet connection will be used to attach to your SLC 8000 Console Manager or SLB Branch Office Manager.

2. INSTALLING THE SIM CARD & ANTENNAS

Insert a SIM card into the ES Series device before connecting any external equipment or powering it up using a Phillips screwdriver:

1 Remove the four screws securing the cover. Save the screws for re-installation. Remove the cover.

2 Slide the SIM card into the SIM card holder. Note the orientation of notched corner of SIM card for proper alignment.

3 Reattach the cover using screws removed in **step 1**.

4 Connect both RF antennas, as shown in the illustration. Adjust the antennas so they are in a V-formation, with a separation of 90 degrees.

5 Connect the power cable to the gateway and apply power. The gateway starts automatically as indicated by the flashing LEDs. It automatically begins the activation process and attempts to connect to the network. This activation process typically takes 5 -10 minutes. Once the "signal" LED remains solid, proceed to the next step.

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3. CONNECT TO LANTRONIX SLC 8000 ADVANCED CONSOLE MANAGER / SLB BRANCH OFFICE MANAGER

Using the included CAT5 Ethernet cable, connect the ES450 LTE Gateway to the Ethernet2 (Eth2) connection of your SLC 8000 or SLB console unit. To complete your LTE Gateway set up, you may need to upgrade your SLC or SLB firmware to the appropriate version. (Minimum firmware version: SLC 8000: 7.6.0.1; SLB: 6.6.0.0)

1 Log into your Lantronix SLB or SLC 8000 console web manager. From the **Network** tab, change the Eth2 settings to "Specify" and enter the **IP address** and **Subnet Mask** shown below. It is also a best practice to "Specify" a static IP address on the Eth1 interface for proper fail-over functionality.

Ethernet Interfaces

Eth1 Settings:
- ○ Disabled
- ○ Obtain from DHCP
- ○ Obtain from BOOTP
- ● Specify:

IP Address: 172.20.198.131
Subnet Mask: 255.255.255.0
IPv6 Address: (Static)
IPv6 Address: (Link Local) fe80::220:4aff:fe9d:35c/64
Mode: Auto ▼
MTU: 1500

Eth2 Settings:
- ○ Disabled
- ○ Obtain from DHCP
- ○ Obtain from BOOTP
- ● Specify:

IP Address: 192.168.13.20
Subnet Mask: 255.255.255.0
IPv6 Address: (Static)
IPv6 Address: (Link Local)
Mode: Auto ▼
MTU: 1500

2 From the **Network** tab, **Fail-Over Cellular Gateway Configuration** section, select **Fail-over Device:** "Sierra Wireless ES450" in the drop-down menu. Next, enter **APN of Mobile Carrier** for SIM card provided by your mobile carrier. Next select the **Reboot Gateway When Making Changes** toggle.

If a PIN is required, select the **PIN Lock** toggle and enter appropriate PIN. Otherwise leave blank.

Fail-Over Cellular Gateway Configuration

Fail-over Device: Sierra Wireless ES450 ▼
APN of Mobile Carrier: vzwinternet
Admin Login: user
Admin Password: •••••
Change Admin Password: ☑
New Admin Password: _____ Retype: _____
Reboot Gateway When Making Changes: ☐

Advanced Cellular Gateway Configuration

SIM Card PIN Lock: ☑
PIN # for SIM Card: _____ Retype: _____
SIM PUK: _____ Retype: _____

3 Default login credentials will be entered automatically. It is **strongly recommended** to change your Admin password immediately in the highlighted section!

Admin Login: user
Admin Password: •••••
Change Admin Password: ☑
New Admin Password: _____ Retype: _____
Reboot Gateway When Making Changes: ☐

4 Under **Fail-Over Settings** - Enter the **Fail-over Gateway IP Address** as: **192.168.13.31.** This is the IP address of the ES450 Gateway.

Fail-Over Settings

Fail-over Gateway IP Address: 192.168.13.31

5 Under **Fail-Over Settings,** set **IP address to Ping** to a remote host accessible only over Ethernet1 on your network. When this IP address is unreachable, the SLC or SLB will fail-over to the Gateway connected to the Eth2 port.

Fail-Over Settings

Fail-over Gateway IP Address: 192.168.13.31
IP Address to Ping to Trigger Fail-Over: 172.20.199.45
Ethernet Port for Ping: ● Eth1 ○ Eth2
Delay between Pings: 3 seconds
Number of Failed Pings: 10

6 Click **Apply** to accept changes. The SLC/SLB will make the setting changes and your ES450 Gateway will reboot. This process typically takes from 2-5 minutes. Fail-over is now enabled to your LTE cellular gateway.

Apply

Technical Support

For technical support queries, visit http://www.lantronix.com/support or call (800) 422-7044 Monday – Friday from 6:00 a.m. – 5:00 p.m., Pacific Time, excluding holidays.

If interested in obtaining SIM cards for evaluation purposes, please contact your Lantronix Sales Representative (800) 422-7055 or sales@lantronix.com.

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