Your package contains:
- 250-5098-510
- 250-5098-310
- 250-5048-510
- 250-5048-310
- 140-5048-600
- 140-5048-401
- 140-5018-600
- ETSI/AS/NZ Compliant

If you ordered Viper SC+ part number:
- 250-5098-500
- 250-5048-500
- 250-5028-502
- 250-5018-500

If you ordered Viper SC+ part number:
- 250-5098-300
- 250-5048-300
- 250-5028-300
- 250-5018-300

Viper SC+ Developer Kits (2 Piece Kit)

If you ordered Viper SC+ part number:
- 250-5018-600
- 250-5018-601
- 250-5048-600
- 250-5048-601

Viper SC+ Developer Kits (3 Piece Kit)

If you ordered Viper SC+ part number:
- 250-5018-500
- 250-5028-500
- 250-5048-500
- 250-5098-500

If you ordered Viper SC+ part number:
- 250-5018-501
- 250-5028-501
- 250-5048-501
- 250-5098-501

If you ordered Viper SC+ part number:
- 250-5018-503
- 250-5028-503
- 250-5048-503
- 250-5098-503

Your package contains:
- 2- and 3-Piece Kit Additional Items
  - SMA Male to BNC Female Connector
  - SMA Female to BNC Male Connector
  - TNC Male to BNC Female Connector
  - Mini Circuits 5 W 20 dB Attenuator
  - Flex Rubber Duck Antenna (VHF, UHF, or 900 MHz)
  - 120 VAC to 13.8 VDC 4 A Power Supply

Product Documentation

Kit Components

<table>
<thead>
<tr>
<th>Description</th>
<th>Item</th>
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<tbody>
<tr>
<td>Viper SC+ IP Router</td>
<td></td>
</tr>
<tr>
<td>60 in. Cat 5 Ethernet Cable</td>
<td></td>
</tr>
<tr>
<td>Power Cable</td>
<td></td>
</tr>
<tr>
<td>SMA Male to BNC Female Connector</td>
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<td>SMA Female to BNC Male Connector</td>
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<tr>
<td>Mini Circuits 5 W 20 dB Attenuator</td>
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</tr>
<tr>
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<td></td>
</tr>
<tr>
<td>120 VAC to 13.8 VDC 4 A Power Supply</td>
<td></td>
</tr>
</tbody>
</table>

**Viper SC+ Developer Kits (2 Piece Kit)**

Your package contains:
- (1) Viper SC+ IP Router
- (60) Cat 5 Ethernet Cable
- (1) Power Cable
- (1) Start Up CD-ROM and Product Documentation Card

**Viper SC+ Developer Kits (3 Piece Kit)**

Your package contains:
- (2) Viper SC+ Basic Units
- (2) SMA-Male to BNC-Female Connectors
- (2) SMA Female to BNC Male Connectors
- (2) TNC Male to BNC Female Connectors
- (2) Mini Circuits 5 W 20 dB Attenuators
- (2) Flex Rubber Duck Antennas (VHF, UHF, or 900 MHz)
- (2) 120 V AC to 13.8 V DC 4 Amp Power Supply

CalAmp reserves the right to update its products, software, or documentation without obligation to notify any individual or entity. Product updates may result in differences between the information provided and the product shipped. For access to the most current product documentation and application notes, visit [CalAmp’s website](http://help.calamp.com/files/references/manuals/Viper_SC_User_Manual.pdf).

Any changes or modifications not expressly approved by the party responsible for compliance (in the country where used) could void the user’s authority to operate the equipment.
**Setup and Configuration**

These instructions allow you to set up a Viper SC+ IP Router to verify basic unit operation and experiment with network designs and configurations. To eliminate unnecessary disruption of traffic on the existing network while you become familiar with the Viper SC+, you should use a network IP subnet address that does not overlap with subnets currently in use in your test area.

**Antenna & Attenuator Connection**

An Rx/Tx antenna is required for basic operation. Assemble antenna and connectors as shown in the accompanying figure. Antenna and connectors are sold separately.

For quick setup, select **Setup Wizard**, the bottom selection of the main menu (to the left). The introductory page of the Viper SC+ Setup Wizard is displayed as shown in the following figure. Arranged vertically on the left side is the main navigation menu.

The Setup Wizard consists of five (5) steps. Each step is presented as a single page with instructions on what fields to fill in or select from. Each of the five pages for each step of the Setup Wizard contain the basic configuration settings that are most commonly required to select or change to set up the Viper SC+ IP router for specific functionality. Instructions for each of these steps are provided on the web page for the step.

### Step 2

Open a Web browser and enter 192.168.205.1 in the Address Bar. When the connection Login window appears, enter the User name: **Admin** and the Password: **ADMINISTRATOR** (both **Admin** and **ADMINISTRATOR** are case-sensitive) and click **OK**.

Viper SC+ Web Interface and Setup Wizard

Step 2

Once you have logged in you will see the Home page of the Viper Web Interface as shown in the following figure. Arranged vertically on the left side is the main navigation menu.

### Note:

- It is important to use attenuation between all demo units in the test network to reduce the amount of signal strength in the test environment.
- To simulate data traffic over the radio network, use the PC connected to the Viper SC+ Ethernet port to Ping each unit in the network multiple times. For more information about configuring the Viper SC+, refer to the Viper SC+ User Manual (PN 001-5008-000).
- We recommend encryption be enabled for your wireless network. The encryption phrase/key must be the same for all devices on your network.
- The introductory page of the Viper SC+ Setup Wizard is displayed as shown in the following figure. Read the instructions carefully.

### Device Connections

**Refer to the diagram below for proper device connections.**

Connect an Ethernet cable to the **LAN** port of the Viper SC+ and connect the other end into the Ethernet port of your PC. Primary power for the Viper SC+ must be within 10-30 V DC and must be capable of providing:

- 10 W power for Tx at 1 W
- 40 W power for Tx at 5 W or
- 60 W power for Tx at 10 W

Viper SC+ Demo kits include a power supply with spring terminals. Observe proper polarity when connecting the cables to the power supply. The white wire must be connected to the red wire or B+ supply, as shown in the above figure.

### Accessing the Viper SC+ Web Server

The Viper SC+ is configured via a Web-browser interface and contains a DHCP server which will automatically assign an IP address to your PC, however in some cases it may be necessary to change the network settings on the PC to accept the IP address assigned by the Viper DHCP server.

**Step 1**

Enable a network connection with the following LAN settings:

- **IP Address:** 192.168.205.1
- **Subnet Mask:** 255.255.255.0
- **Default Gateway:** 192.168.205.1
- **Enable a network connection with the following LAN settings:**
  - **IP Address:** 192.168.205.1
  - **Subnet Mask:** 255.255.255.0
  - **Default Gateway:** 192.168.205.1

**Note:** Some settings (indicated by a yellow alert symbol) in the Setup Wizard web pages require a reset of the Viper before they will take effect. If you change any of these settings, be sure to reboot the Viper when you have finished the Setup Wizard.

### Setup Wizard Quick Setup

Enter the following in the Setup Wizard for quick setup. **Click Next** as you complete each page in sequence. (You can click Previous to review settings in a previous page if needed.)

**Step 1**

- **Assign a unique Station Name and select how unit will function.**
- **Station Name:** Assign a unique Station Name
- **IP Forwarding Mode:** Bridge mode
- **Relay Point:** No
- **Access Point:** No
- **Multi-Speed Mode:** Disabled

**Step 2**

- **Default configuration:** To monitor or change configuration remotely, each unit requires a unique IP address. When configuring more than one unit, be sure to increment IP addresses. (Enter this address in the browser after reset.)
- **IP Address:** 192.168.205.1
- **Net Address Mask:** 255.255.255.0
- **Default Gateway:** 192.168.205.1
- **Enable encryption for your wireless network.**
- **Encryption:** Enabled
- **Encryption Pass Phrase:** Enter an encryption phrase

**Step 3**

- **Assign IP address:** 192.168.205.1
- **Net Address Mask:** 255.255.255.0
- **Default Gateway:** 192.168.205.1
- **Enable encryption:** Enabled
- **Encryption Pass Phrase:** Enter encryption phrase

**Step 4**

- **Assign IP address:** 192.168.205.1
- **Net Address Mask:** 255.255.255.0
- **Default Gateway:** 192.168.205.1
- **Enable encryption:** Enabled
- **Encryption Pass Phrase:** Enter encryption phrase

**Step 5**

- **Assign IP address:** 192.168.205.1
- **Net Address Mask:** 255.255.255.0
- **Default Gateway:** 192.168.205.1
- **Enable encryption:** Enabled
- **Encryption Pass Phrase:** Enter encryption phrase

**Check For Normal Operation**

To simulate data traffic over the radio network, use the PC connected to the Viper SC+ Ethernet port to Ping each unit in the network multiple times. For more information about configuring the Viper SC+, refer to the Viper SC+ User Manual (PN 001-5008-000).

**Technical Support**

For assistance with this product, contact CalAmp technical support.

**Email:** productsupport@calamp.com

**Phone:** 1.507.833.6701, Option 2 for Fixed, Narrowband, and Radio Modem products

Or visit the Support section of our website at http://www.calamp.com/support.
for the telemetry and asset tracking markets, private wireless networks, Interoperable Train Control (ITC) radio transceivers for use in railroad Positive Train Control (PTC) applications, public safety communications and critical infrastructure and process control applications. For additional information, please visit the Company's website at www.calamp.com.