1. Introduction

**NOTE:**
This Quick Deploy Guide is a general reference to give the installer an overview of the steps required to make this system operational. The Product Manual is the definitive source for detailed installation instructions and information.

For best results, update to the latest data logger operating system and version of Device Configuration Utility.

You should have received two Quick Deploy Guides with your RV50(X) module. The one you follow will depend on whether your module was configured with a private dynamic or public static IP address.

The Provisioning Report received with your Cellular Data Service shows whether the module was configured with a private dynamic or public static IP address. See the following figure for an example of a Campbell Scientific Provisioning Report. Other cellular providers should provide similar information.

USE THIS GUIDE if your module has a public static IP address.

2. Campbell Scientific cellular data service

Campbell Scientific can provide subscriptions to cellular service through Verizon, AT&T, T-Mobile, Vodafone, Telstra, and over 600 other providers worldwide. When this cellular service is purchased with the module, the module will come pre-provisioned with the required SIM card and APN. If you have already purchased the RV50(X), call Campbell Scientific to set up service.

3. Install the SIM card

**NOTE:**
If you purchased cellular service from Campbell Scientific with the module, it will come with the SIM (Subscriber Identity Module) card already installed.
1. Remove the SIM card cover.
2. Note the location of the notched corner for correct alignment. The gold contact points of the SIM face down when inserting the SIM card as shown in the following figure. Gently slide the card into the slot until it stops and locks into place. To eject the SIM card, press it in slightly and release.
3. Replace the SIM card cover.

![SIM card installation](image)

*(Click image to expand/collapse display)*

**FIGURE 3-1. SIM card installation**

4. **Configure RV50(X)**

1. Download the collection of RV50(X) configuration templates from www.campbellsli.com/downloads and run the executable downloaded.
2. Connect the **Cellular** antenna.
3. Connect the **Diversity** antenna, if used. Recommended but not required. Note: If a **Diversity** antenna is not used, use ACEmanager to disable **WAN/Cellular | Network Credentials | RX Diversity**.
4. Connect the power cable leads to a power supply.

<table>
<thead>
<tr>
<th>Wire Color</th>
<th>Function</th>
<th>Connect To</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>Ground</td>
<td>G</td>
</tr>
<tr>
<td>White</td>
<td>Enable (On/Off)</td>
<td>12V or SW12V or control port</td>
</tr>
<tr>
<td>Red</td>
<td>Power (7 to 36 V)</td>
<td>12V</td>
</tr>
</tbody>
</table>

5. Connect the power cable to the RV50(X) **DC Power** input. When the RV50(X) is properly set up and powered, the status LEDs will turn on. The RV50(X) will begin the activation/provisioning process and attempt to connect to the mobile network. This process typically takes 5 to 10 minutes. A successful connection is indicated by a solid green or solid amber **Network LED**.

**NOTE:**
If Campbell Scientific did not provision the RV50(X) or it does not automatically connect to the network, you may need to to confirm or enter your APN information. Follow steps 6 through 8 to **WAN/Cellular | SIM Slot 1 Configuration | Network Credentials | User Entered APN**.

6. Connect your Windows® computer to the RV50(X) using the supplied Ethernet cable.
8. Log in using **User Name** = user and **Password** = 12345. (We strongly recommend changing the default password to prevent unauthorized access and the potential of malware infection. The password can be changed from the **Admin** tab.)

![ACEmanager login screen](image)

9. Once logged in, check the **Status | Home | Network State** field. It should read Network Ready, indicating the RV50(X) is connected to the cellular network. You can easily test the RV50(X) connection to the Internet by selecting the **Admin | Advanced** tab and using the **PING** tool to ping an Internet server, such as www.campbellsli.com.
10. Click the **Template** button in the ACEmanager toolbar. A template application window will appear. Browse to and upload one of the configuration templates downloaded from Campbell Scientific.
**Template Files**

<table>
<thead>
<tr>
<th>Template File Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RV50_115200.xml</td>
<td>Default configuration with RS-232 at 115200 baud and Ethernet communication enabled.¹</td>
</tr>
<tr>
<td>RV50_9600.xml</td>
<td>Default configuration with RS-232 at 9600 baud and Ethernet communication enabled.²</td>
</tr>
</tbody>
</table>

¹CR1000X series, CR300 series, CR6 series, CR1000, CR3000, CR800 series, CR5000, and GRANITE 6/9/10

11. Reboot the RV50(X) after successfully applying the configuration template. You can do this by clicking the Reboot button on the ACEmanager toolbar, by momentarily pressing the Reset button (2 sec), or by temporarily removing power from the RV50(X).

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### 5. Enabling PPP mode

Launch the Device Configuration Utility. All tabs are within the **Deployment** category.

On the **Datalogger** tab, make note of the data logger **PakBus Address** (default address is 1).

On the **Com Ports Settings** tab, select the **COMPort** where the module is connected; this is generally RS-232. Change the **Baud Rate** to 115200 Fixed.

On the **PPP** tab select the **Config/Port Used** where the modem is connected. This is the same as was selected on the **Com Ports Settings** tab. Set **Modem Dial String** to AT\APPP.

**Apply** to save your changes.

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### 6. Set up LoggerNet

1. Select **Add Root > IPPort**
2. Select **PakBusPort**
3. Add a data logger to the **PakBusPort**
4. Select the **IPPort** in the Network Map. Enter the RV50(X) IP address and port number. The IP address and port number are input in the **Internet IP Address** field separated by a colon. Preceding zeros are not entered in the **Internet IP Address** (for example, 070.218.074.247 is entered as 70.218.74.247). The default port number is 6785.
5. For PakBus data loggers, leave the default settings for the PakBusPort. PakBus Port Always Open should not be checked. If used, enter the TCP Password.

6. For PakBus data loggers, select the data logger in the Network Map and set the PakBus Address to match that of the data logger (default address in the data logger is 1). If a PakBus Encryption Key was entered during data logger setup, also enter it here. Click Apply to save the changes.

7. Test the connection

Use the Connect screen to test the connection. Click on the appropriate station and click Connect to initiate a call to the data logger.

**TIP:**
The connection time is subject to many external factors. It is often less than 30 seconds but could be up to fifteen minutes. Be patient.

If the call is successful, the connectors at the bottom of the screen will come together and clock information from the data logger will be displayed in the Station Date/Time field.