Sierra Wireless Airlink®
4G LTE Cellular Modem
For Private Dynamic IP Addresses

Part Number 35782
08/2019

www.campbellsci.com/rv50

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.

1. 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 private dynamic IP address.

FIGURE 1. Private dynamic IP provisioning report

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.

4. Konect PakBus Router setup

4.1 Get started

Open a web browser and go to www.konectgds.com. First-time users need to create a free account. After you submit your information, you will receive two emails up to five minutes apart. One email will contain a Passport ID and the other your Password. If emails are not received, check your email junk folder.

You will need the Konect PakBus Router redemption code that came on a card with the RV50(X).

4.2 Set up Konect PakBus Router

1. Sign in to www.konectgds.com using your Passport ID and Password found in the two received emails. Once logged in, you will be at the Welcome page.

2. Click devices and services on the command bar to the left and select Redeem PakBus Router Code. Enter your complimentary Router Code found on the included card with your cellular-enabled device and click Submit.

3. The next screen shows the assigned DNS address and Port for the router. An optional TCP Password may be entered for additional security, and you must select a unique PakBus Address for your data logger.

TIP: Make note of this information for use in later steps.
5. Configure RV50(X)

1. Download the collection of RV50(X) configuration templates from [www.campbellsci.com/downloads](http://www.campbellsci.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.

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**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.)

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.campbellsci.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.

<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.</td>
</tr>
<tr>
<td>RV50_9600.xml</td>
<td>Default configuration with RS-232 at 9600 baud and Ethernet communication enabled.</td>
</tr>
<tr>
<td>CR1000X series, CR300 series, CR6 series, CR1000, CR3000, CR800 series, CR5000, and GRANITE 6/9/10</td>
<td></td>
</tr>
</tbody>
</table>

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).
6. Enabling PPP mode

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

On the Datalogger tab, change the data logger PakBus Address and optional PakBus/TCP Password to match the values entered in the Set up Konect PakBus Router (p. 2) step.

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.

On the Network Services tab, in the PakBus/TCP Clients box, type the DNS address and Port number noted during the Set up Konect PakBus Router (p. 2) step.

7. Set up LoggerNet

1. Select Add Root > IPPort
2. Select PakBusPort and pbRouter for PakBus data loggers such as the CR1000X or CR300.
3. Add a data logger to the pbRouter.
4. Select the IPPort in the Network Map. Enter the Konect PakBus Router DNS address and port number as noted in the Konect PakBus Router setup. The DNS address and port number are input in the Internet IP Address field separated by a colon. For example, axanar.konectgds.com:pppp where pppp is the port number.
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.

![Image of PakBusPort settings]

6. For PakBus data loggers, select the pbRouter in the Network Map and set the **PakBus Address** to 4070.

![Image of pbRouter selection]

7. 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.

![Image of data logger selection]

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8. **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.

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**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.