



RV50

Sierra Wireless AirLink®
4G LTE Cellular Modem



Part Number 31887
Revision: 12/2018



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.

A public static IP account must be used when the module is set up in serial server mode. Private dynamic IP accounts do not support the serial server mode.

The Provisioning Report received with your Cellular Data Service shows whether the module was configured with a private dynamic or public static IP address.

USE THIS GUIDE if you have a public static IP address. See **FIGURE 1-1** (p. 1). See the RV50 Manual if you have a private dynamic IP address.

Cellular Data Service Provisioning Report

The following device has been provisioned for Campbell Scientific Cellular Data Service.

Sales Order #	12/31/1969	Sales Order Due Date	12/31/1969
Sales Order Date	12/31/1969	Date Provisioned	11/06/2018
Company	Campbell Scientific Inc Marketing	Customer ID	3388
Address	1000 11th St SW	Contact	
City	Bozeman	Phone	406 552 4600
State	MT	Email	marketing@campbellsci.com
Country	United States		
Postal Code	59717-1704		
Hardware Model #	3388-01	Datalogger (-40 to +70C) -CELL210 w/4G LTE CAT1 VZ -VS Verizon US Static IP	
Serial #	3388-01-CELL210-05	Static IP	
Provision Code	3388-01	CR300-CELL210-VS	Datalogger (-40 to +70C) -CELL210 w/4G LTE CAT1 VZ -VS Verizon US Static IP
Data Plan	3388-01	CELLDATA-VS-A250	Campbell Scientific Cellular Data Service Subscription -VS Verizon US Static IP - A250 250MB/Mon for 1 Yr
Data Limit	3388-01		Network: Verizon
ICCID	89012345678901234567	IP Address	166.167.167.167
MSISDN	406 552 4600	Konect Plus Redempt Code	
IMEI	35465303123456789012		
Renewal Due Date	2019-09-22	Service Period	11/15/2018 to 12/14/2019

FIGURE 1-1. Static 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, 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 **FIGURE 3-1** (p. 2). **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.

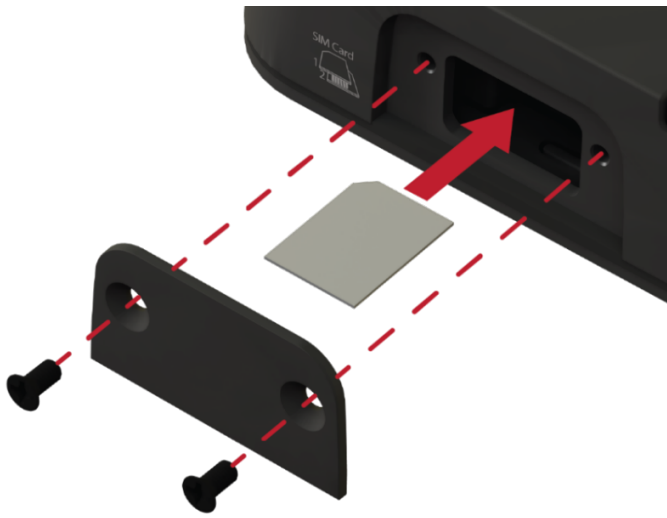


FIGURE 3-1. SIM card installation

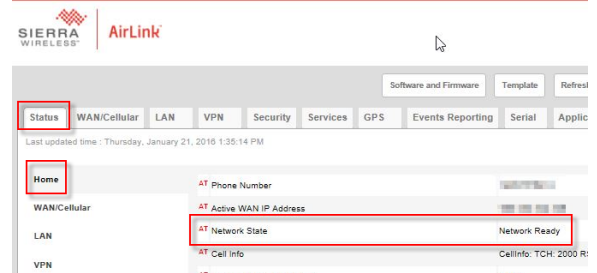
4. Configure RV50

1. Download the collection of RV50 configuration templates from 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.

Wire Color	Function	Connect To
Black	Ground	G
White	Enable (On/Off)	12V or SW12V or control port
Red	Power (7 to 36 V)	12V

5. Connect the power cable to the RV50 **DC Power** input. When the RV50 is properly set up and powered, the status LEDs will turn on. The RV50 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.
6. Connect your Windows® computer to the RV50 using the supplied Ethernet cable.
7. Launch a web browser, and enter <http://192.168.13.31:9191> into the address bar. The ACEmanager login screen should appear in your browser.

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 is connected to the cellular network. You can easily test the RV50 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.

Template Files	
Template File Name	Description
RV50_115200.xml	Default configuration with RS-232 at 115200 baud and Ethernet communication enabled. ¹
RV50_9600.xml	Default configuration with RS-232 at 9600 baud and Ethernet communication enabled. ²
¹ CR1000, CR1000X series, CR800 series, CR6 series, CR300 series, CR3000, CR5000	
² CR200(X)	

11. Reboot the RV50 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.

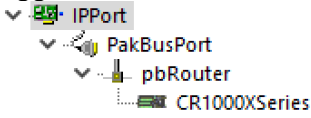
5. Set up hardware

The simplest hardware setup for modern dataloggers is to connect a null module cable between the RS-232 ports of the datalogger and the RV50.

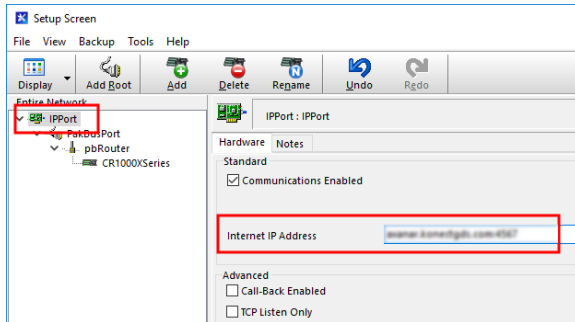
6. Set up LoggerNet

1. Select **Add Root > IPPort**.
2. Select **PakBusPort** and **pbRouter** for PakBus data

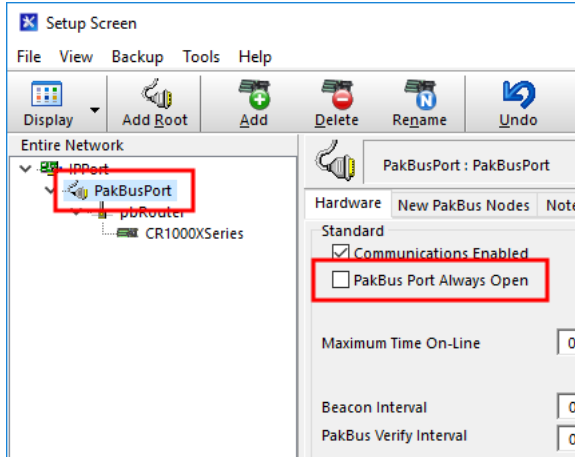
loggers such as the CR1000X.



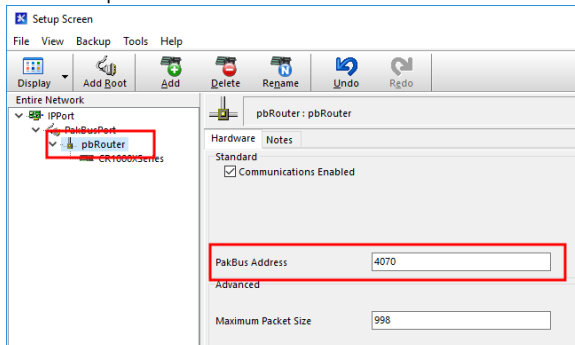
3. Add a data logger to the **pbRouter**.
4. Select the **IPPort** in the Network Map. Enter the Konect PakBus Router DNS address and port number as noted in the Konect PakBus Router setup. The DNS address and port number are input in the **Internet IP Address** field separated by a colon. For example, axanar.konect-gds.com:pppp where pppp is the port number.



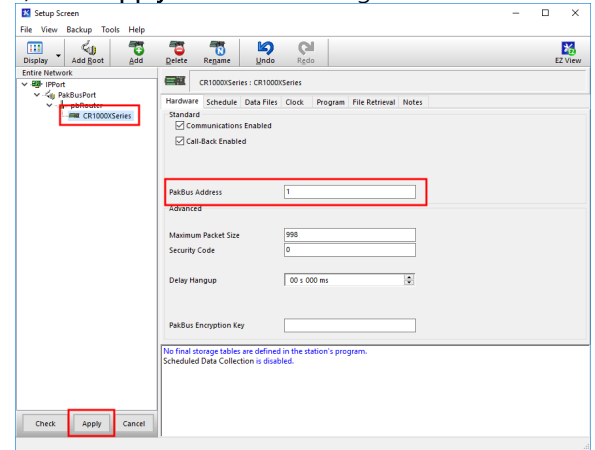
5. For PakBus data loggers, leave the default settings for the **PakBusPort**. **PakBus Port Always Open**; it should not be checked. If used, enter the **TCP Password**.



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



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). 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.

