Campbell SCIENTIFIC | QUICK DEPLOY GUIDE

# CELL200-Series

4G LTE Cellular Module
For Private Dynamic IP Addresses




Part Number: 35036
Revision: 11/2025
www.campbellsci.com/cellular-communications

## 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.

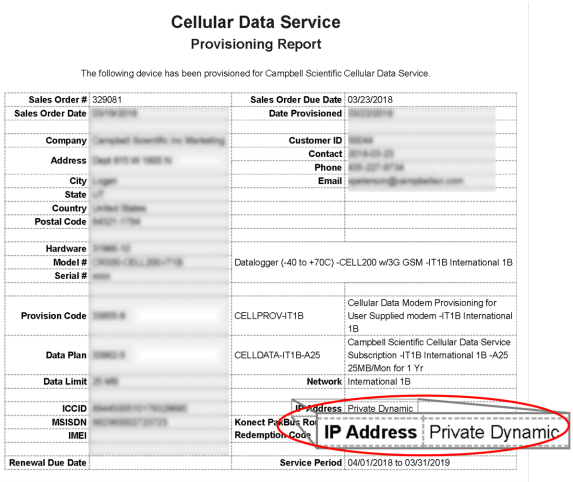
For best results, update to the latest data logger operating system and version of ***Device Configuration Utility***.

**NOTE:**
CR3000, CR1000 and CR800-series users must refer to the CELL200 Product Manual. This Quick Deploy Guide does not apply.

You should have received two Quick Deploy Guides with your CELL200-series 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.



**Cellular Data Service**
**Provisioning Report**

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

| | | | |
|---|---|---|---|
| **Sales Order #** | 329081 | **Sales Order Due Date** | 03/23/2018 |
| **Sales Order Date** | [redacted] | **Date Provisioned** | [redacted] |
| **Company** | [redacted] | **Customer ID** | [redacted] |
| **Address** | [redacted] | **Contact** | [redacted] |
| | | **Phone** | [redacted] |
| **City** | [redacted] | **Email** | [redacted] |
| **State** | [redacted] | | |
| **Country** | [redacted] | | |
| **Postal Code** | [redacted] | | |
| **Hardware** | [redacted] | | |
| **Model #** | [redacted] | Datalogger (-40 to +70C) -CELL200 w/3G GSM -IT1B International 1B | |
| **Serial #** | [redacted] | | |
| **Provision Code** | [redacted] | CELLPROV-IT1B | Cellular Data Modem Provisioning for User Supplied modem -IT1B International 1B |
| **Data Plan** | [redacted] | CELLDATA-IT1B-A25 | Campbell Scientific Cellular Data Service Subscription -IT1B International 1B -A25 25MB/Mon for 1 Yr |
| **Data Limit** | [redacted] | **Network** | International 1B |
| **ICCID** | [redacted] | **IP Address** | Private Dynamic |
| **MSISDN** | [redacted] | **Konect Pass Bus Redemption Code** | [redacted] |
| **IMEI** | [redacted] | | |
| **Renewal Due Date** | [redacted] | **Service Period** | 04/01/2018 to 03/31/2019 |

IP Address | Private Dynamic

*Figure 1-1. Private dynamic IP provisioning report*

Additionally, Campbell Scientific cellular modules configured with a private dynamic IP address will have one sticker on the module, as shown in the following figure. It will show the module phone number and data plan. **USE THIS GUIDE.**

Campbell Scientific cellular modules configured with a public static IP address will have two stickers on the module. One sticker will show the module phone number and data plan. The second sticker will show the static IP address. **USE THE OTHER GUIDE.**

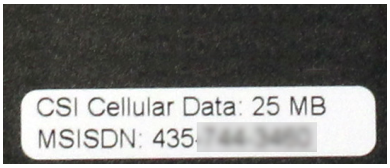



*Figure 1-2. Module with private dynamic IP address*

## 2. Campbell Scientific cellular data service

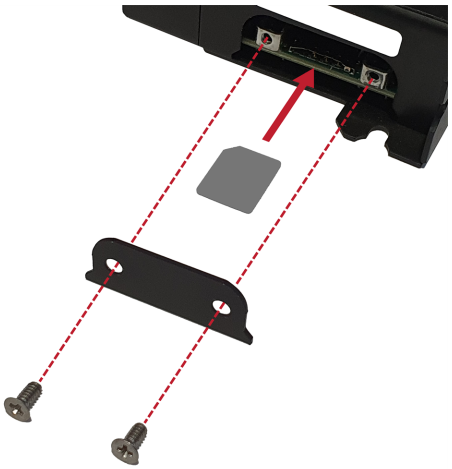
Campbell Scientific can provide subscriptions to cellular service through Verizon, AT&T, T-Mobile, Vodafone, Telstra, and over 600 other providers worldwide. When this cellular service is purchased with the module, the module will come pre-provisioned with the required SIM card and APN. If you have already purchased the CELL200 series, 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. .

**NOTE:**
Some SIM cards, particularly those purchased in Germany, come with an active personal identification number (PIN). The PIN must be deactivated before proceeding. Often, an easy way to deactivate the PIN is to install the SIM card in a mobile phone and use the device settings.

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.

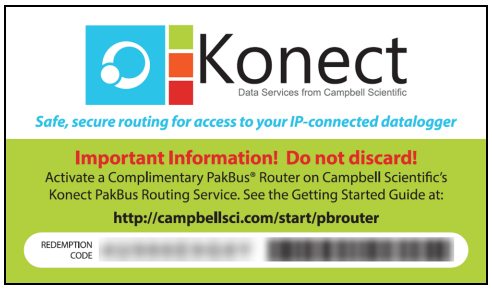


# 4. Konect PakBus Router setup

> **NOTE:**
> If you are not using Konect PakBus Router, skip this section.

## 4.1 Get started

You will need the Konect PakBus Router redemption code that came on a card with the CELL200 series.



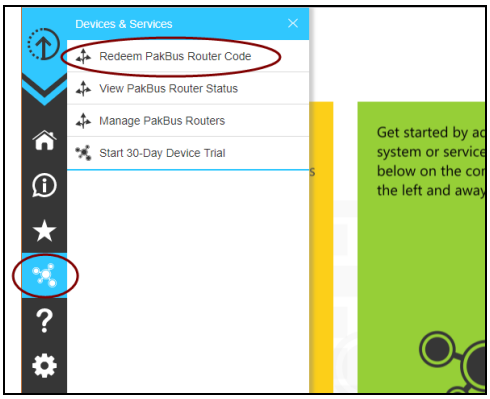

Open a web browser and go to www.konectgds.com.

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.



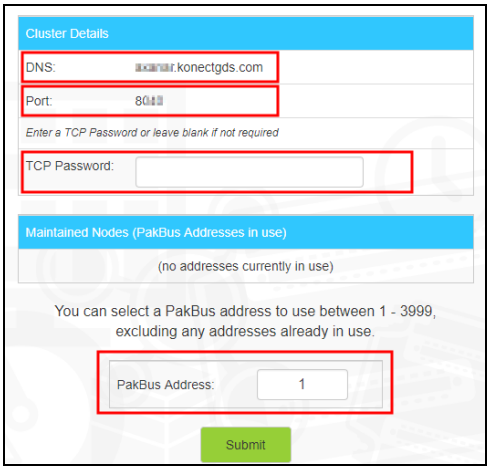

## 4.2 Set up Konect PakBus Router

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. Enter a **TCP Password** and select a unique **PakBus Address** for your data logger.

> **TIP:**
> **Make note of this information**; it will be required for data logger configuration as well as ***LoggerNet*** setup. Please note your **DNS**, **Port**, **TCP Password** and **PakBus address**; you will need them later.




# 5. Hardware and software configuration

## 5.1 Set up hardware

1. Connect the cellular antenna if it is not already connected. When using a MIMO antenna with multiple cellular connections, connect the primary cable to **Primary**, **Primary Antenna**, or **Antenna** and the secondary to **Diversity** or **Diversity Antenna** (depending on the label). If the cables are

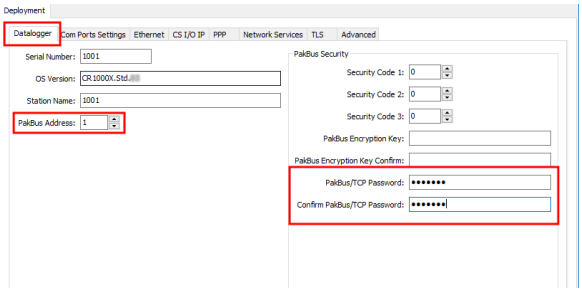
not marked in this way, they can be connected to either antenna port.

The CELL230 has both **Antenna** and **GPS** antenna connections. Use `CellGNSS()` to enable and disable the GPS under program control.

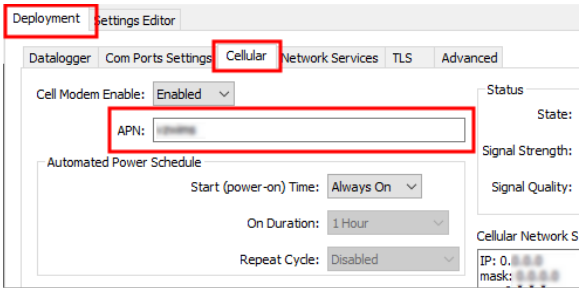
2. Connect your data logger RS-232 or CS I/O port to the CELL200-series module RS-232 or CS I/O port. Ensure the same port is used for each device, for example RS-232 to RS-232.
3. If not connecting through CS I/O, provide power to the CELL200 series. The data logger provides power through the CS I/O port. USB power is not sufficient to power the CELL200 series; 12 V is required.

## 5.2 Configure data logger

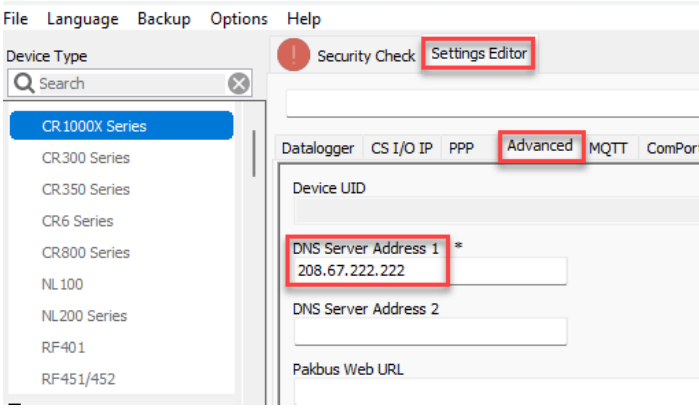
1. Connect to your data logger by using ***Device Configuration Utility***.
2. On the **Datalogger** tab, change the data logger **PakBus Address** and **PakBus/TCP Password** to match the values entered in the Konect PakBus Router setup. The **PakBus/TCP Password** will make the data logger authenticate any incoming or outgoing PakBus/TCP connection.




3. On the **Network Services** tab in the **PakBus/TCP Client** field, enter the DNS address and Port number noted during the Konect PakBus Router setup.
4. On the **PPP** tab, set **Config/Port Used** to **CS I/O SDC8** or **RS-232**, depending on how you are connected to the data logger.
5. (Optional) On the **PPP** tab, set **User Name** and **Password** if required by your cellular carrier (usually outside of the United Sates).
6. Verify the **Modem Dial String** setting is blank.
7. If connecting through RS-232, on the **Comport Settings** tab, set **RS232 BaudRate** to **115200 Fixed**.
8. Click **Apply** to save the changes. Verify the settings in the summary window. (Recommended) **Save** a copy of the settings to a file on the computer. Click **OK**.
9. Shut down ***Device Configuration Utility*** and start it again. This will activate the **Cellular** tab needed for the next step.
10. On the **Cellular** tab, enter the **APN** provided by your cellular provider.




11. On the **Settings Editor** tab, click the **Advanced** sub-tab. Enter a **DNS Server Address** that can resolve the Konect Router server address. If you don't have a specific DNS server to use, you can use OpenDNS: 208.67.222.222.




12. Click **Apply** to save the changes. Verify the settings in the summary window. (Recommended) **Save** a copy of the settings to a file on the computer. Click **OK**.
13. Click **Disconnect** and close ***Device Configuration Utility***.

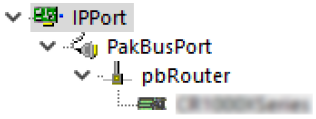
## 5.3 Set up *LoggerNet*

The ***LoggerNet*** Network Map is configured from the **LoggerNet Setup** screen.

> **NOTE:**
> Setup has two options, EZ (simplified) and Standard. Click on the **View** menu at the top of the **Setup** screen, and select **Standard** view.

From the ***LoggerNet*** toolbar, click **Main** > **Setup** and configure the Network Map as described in the following steps:

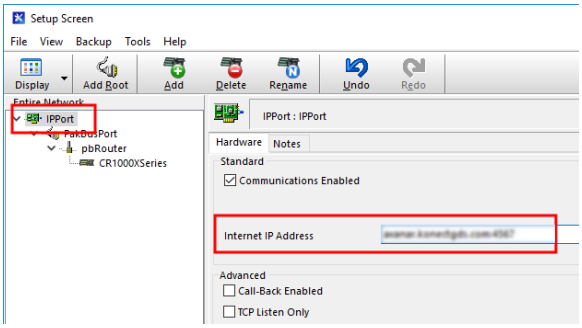
1. Select **Add Root** > **IPPort**.
2. Select **PakBusPort** and **pbRouter** for PakBus data loggers such as the CR6 or CR1000X.



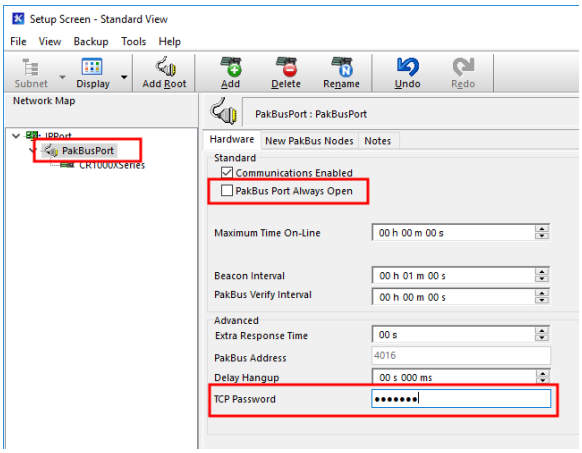

> **NOTE:**
> PakBus data loggers include the following models: GRANITE-series, CR6, CR3000, CR1000X, CR800-series, CR300-series, CR1000, and CR200(X)-series.

3. Add a data logger to the **pbRouter**.

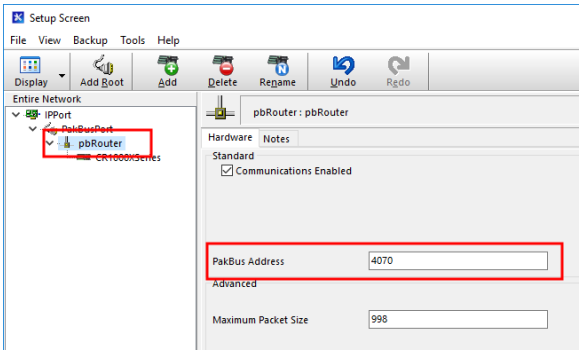
4. From the Entire Network, on the left side, select the **IPPort**. Enter the Konect PakBus Router DNS address and port number as noted in the Konect PakBus Router setup (Set up Konect PakBus Router [p. 2]). Enter them into the **Internet IP Address** field in the format DNS:Port with a colon separating DNS and Port. For example, axanar.konectgds.com:pppp where pppp is the port number.



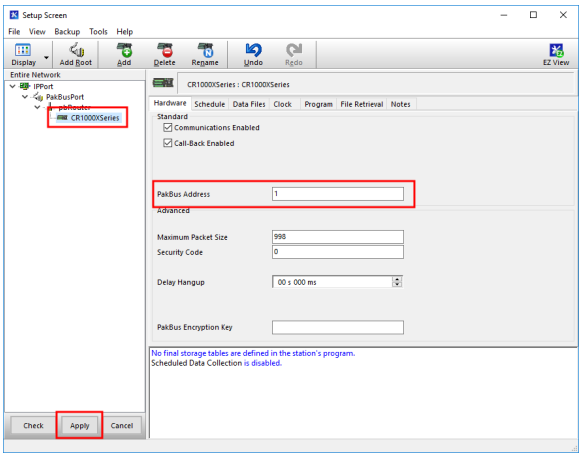

5. Leave the default settings for the **PakBusPort**. **PakBus Port Always Open** should **not** be checked. In the **TCP Password** field enter the TCP Password; this must match the value entered in the Konect PakBus Router setup and ***LoggerNet*** setup.




6. Select the pbRouter in the Network Map and set the **PakBus Address** to **4070**.




7. 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.




## 5.4 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. The data logger must have 12 V power.

> **TIP:**
> The connection time is subject to many external factors. It is often less than 30 seconds but could be up to 15 minutes. Be patient.

If the connection is successful, the connectors icon 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.

