



# GSM Router Setup and Configuration Guide





## GSM 4GLTE Communications Setup Guide

We are pleased to state that all our products at Solar Research Technologies are intelligent and do much more than merely manage solar energy harvest. All products are provisioned with 4GLTE communications to provide you with peace of mind and provide you with a backup or primary internet source that will keep you and your family connected when the grid power goes down!

Some of our installations in the field are in remote physical locations where cable internet is not possible. In these situations, your choices become very limited and can be costly. Satellite is one option but is notoriously slow and expensive. You can rely on us to provide you with an affordable primary internet connection that is robust, powerful, and sustainable using reliable solar energy which is extremely stable regardless of your installation physical location.



## PLEASE NOTE!

It is **NOT NECESSARY** to activate or even use the GSM Router to connect to your system. All V-Core system engines have built-in Wifi, Blue-Tooth and dedicated hard wire communication ports that provide direct and internet-based access regardless of the GSM router status.

## Router Set Up and Configuration Information:

Your new GSM LTE Router is fully installed at the factory. The customer is only responsible for activating the T-Mobile or AT&T SIM card which we provided you at the time of sale based on your selection during the ordering process. The SIM card is already installed and only requires an online activation by the customer. **The following steps are an example of setting up your new T-Mobile SIM card.**

1. You will need your new router **IMEI number**. This is provided to you on your invoice copy. It is a long number and will appear on your invoice as:  
**CUSTOMER ROUTER IMEI CODE: 86810504321xxxxxx** (Example Only)
2. You will need your **SIM CARD NUMBER**. This is found on the back of the included SIM card provided in your shipment in the documentation package. The SIM card carrier looks like the sample shown here:

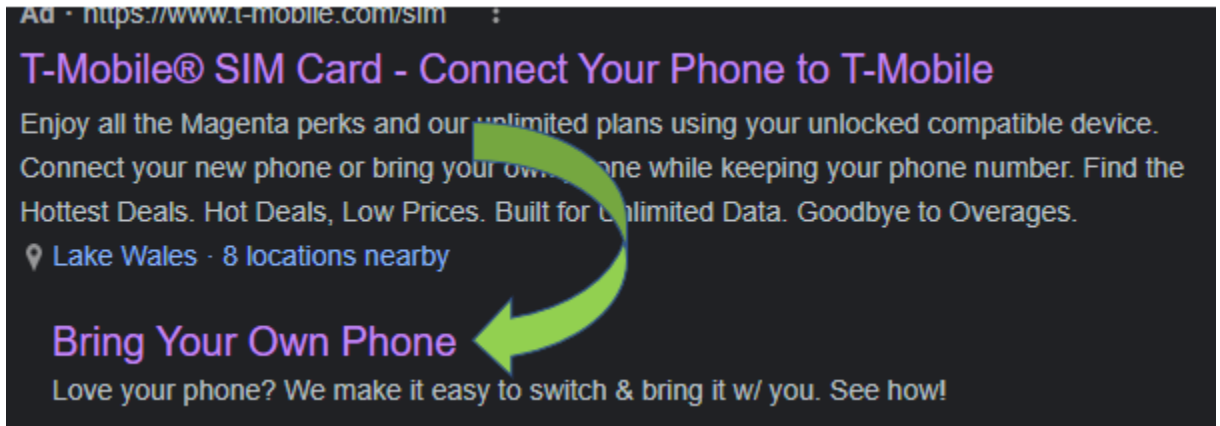


## Router Set Up and Configuration Information, cont.

3. Step One: **Activate the SIM CARD**

The first step to getting internet service connected is to **activate your new SIM card**. This is accomplished by visiting the carrier website, creating your account, and completing the activation steps. This document will guide you through the process smoothly.

First, please open a browser on your laptop or existing network enabled device and using the instructions on the front side of the SIM card carrier, navigate to **tmobile.com/SIM** for T-Mobile cards. In the website selections below, be sure to click on **BRING YOUR OWN PHONE**.



*(If you are using another carrier, follow the instructions provided on the SIM card carrier in your documentation).*

*Our Routers are certified and tested to work on the T-Mobile and AT&T towers. Other SIM cards should also work however we do not offer support for them at this time.*

Click on Let's Get Started shown below.



On the Tmobile.com/SIM webpage, find the section to enter the device IMEI Code and make sure it recognizes your router by inputting the IMEI code mentioned above on your invoice.

# Check compatibility with your phone's IMEI.

Lookup your IMEI to see if your phone is unlocked for free using your device and our checker tool below.

Every phone has a unique number—15 digits that tells you the make, model, and if it's ready to use on our network. Most phones are compatible.

IMEI STATUS CHECK: Dial **\*#06#** to get your phone's IMEI, or [find it in phone settings.](#) ©

After clicking on Check phone, you should see the following response from the T-mobile server:

## You're all set.

Your device is compatible with the T-Mobile network and can take advantage of our most powerful signal, Extended Range LTE.

Finalize the carrier Plan setup choices that you want and activate your new SIM card! The site will ask you to input the SIM card number to complete activation.

If your Solar Research Technologies system will be your primary source of internet, then you should select a plan that will provide you with ample data monthly. Studies report that the average home can consume from **150-500GB of data monthly** depending on your activities, number of people using your internet and other considerations. If on the other hand your system provides only an emergency or backup internet service, you can be much more conservative.

**If you experience any issues or have questions about your plan needs, please contact your GSM carrier and they can assist you. Solar Research Technologies does not provide support for cellular service, plans or technical support with their network.**

## Router Set Up and Configuration Information, cont.

### 4. Step Two: Router Configurations and General Information

After activating your SIM CARD in the above steps, your router needs to be rebooted by power cycling it on the system. Once it comes back up, you will see the lights on the side of the router begin to show activity.

You will see the router on the right-hand side of the internal storage battery mounted to the enclosure wall as shown here:



*(Note: The router is mounted inverted)*

**POWER LIGHT-** The power light should be ON and steady Green.

**SYSTEM LIGHT-** The system light will be steady during Start Up, and blink when Ready.

**SIM LIGHT-** The SIM will be OFF during registering itself, or if the registration fails or no SIM is inserted. It will flash slowly when registered and is ready for dial up. It will turn steady once registered and has connected to the GSM tower.

**SIGNAL STRENGTH-** These indicators will show the relative signal strength of the tower connection. **Careful placement of your antenna will have HUGE EFFECTS** on the signal strength. When mounting your antenna, watch these indicators to show you when you have it in the optimum location at your installation site.

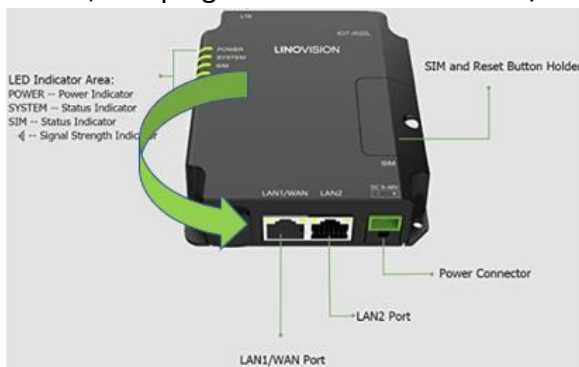
**Please be patient as the first time the router is setting itself up and registering the SIM it can take up to 10 minutes to fully become operational. This is normal and expected behavior.**

As stated earlier, your router is fully connected and ready to run when the system is installed at your location. No further intervention or configuration is required but we wanted to share some useful details for those that want to do optional setup and configurations. We have already set a non-default system password for you at the factory for security purposes during the manufacturing.

Your personal password is included on your invoice and shown as **CUSTOMER ROUTER PASSWORD:xxxxxxxxxxxxxx** and **CUSTOMER ROUTER USER NAME: xxxxxxxx**

### Connecting to your new Router:

To make your first connection to the router, you will need a laptop or a device that has a network RJ45 network port. Connect a standard network CAT5 or CAT6 cable to your device, and plug into either LAN or WAN/LAN port on the router as shown here:



Open your favorite browser, and type in the following into the address bar:

**192.168.1.1**

You will now be connected to your router and at the login screen. Enter your username and password furnished by us to complete the authentication and log in.