

# Quick Setup Guide

## GP3-V1-LTE SMART MODEM



Wireless Technologies USA  
Witech USA Corp

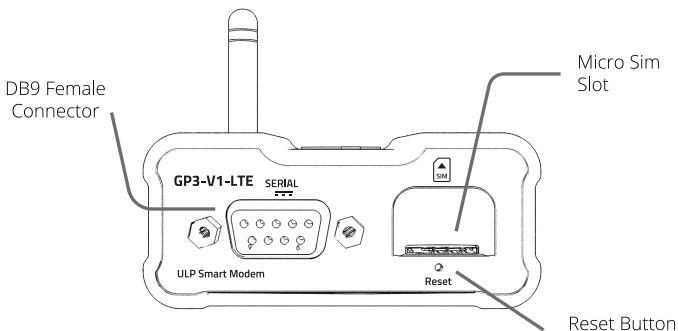


# Content

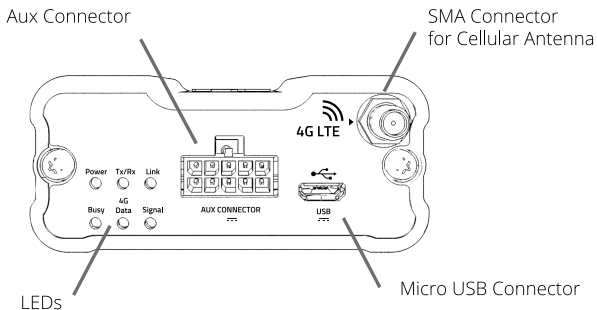
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# Quick look at Modem WT - GP3 4G LTE

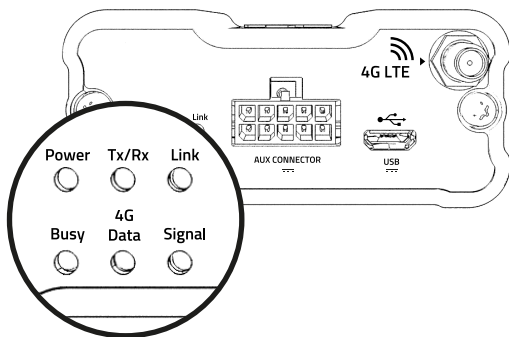
## Front View



## Rear View



# LED Signals



**Power (Red):**  
Indicates if the modem is ON.

**Tx/Rx (Blue):**  
Indicates data flow through USB or D89.

**Link (Green):**  
Indicates the modem connection status.

**Busy (Red):**  
Indicates if the modem is busy.

**4G Data (Blue):**  
Indicates data flow from/to the network.

**Signal (Green):**  
Indicates the signal strength of the modem.

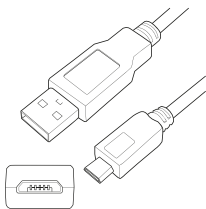
# What comes in the box

The following accessories are included in the modem WT – GP3 4G LTE box:



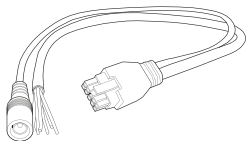
## Cellular Antenna

Using this antenna will allow connection with 3G and 4G LTE networks in the area.



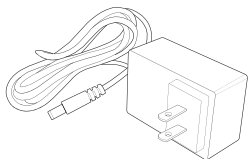
## USB to Micro USB cable

Cable that allows to connect the modem WT – GP3 to any computer via USB for all configurations; update firmware, and/or provide energy from a power adapter.



## Aux cable

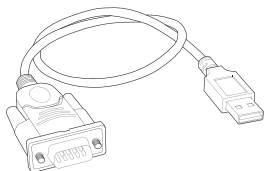
With this cable various functionalities are possible with the WT – GP3 4G LTE. Connect the power adapter; 2 analog inputs, 1 output and 2 digital inputs, as well as I2C pins for connecting to external devices.



### Power Adapter

Use this adapter with the aux cable for providing power to the modem WT – GP3 4G LTE.

## Additional Accessories



### USB – Serial Cable

USB – Serial Cable – this cable is not included in the modem WT – GP3 4G LTE box. Using this cable allows the modem to connect with any computer via DB9 connector to access all configurations and/or history or other stored variables.



### Micro SIM card

SIM card type supported is 3FF type as known as Micro SIM.

**Note:** The user must validate the supported bands at moment to choose SIM Card mobile operator.

# Operational Ratings

## **Power supply:**

5-30 Vdc, 150 mA max, LPS or Class 2 - Main.

5-30 Vdc, 150 mA max, LPS or Class 2 - DB9.

5 Vdc, 230 mA max, LPS or Class 2 - USB.

**Note:** Only one supply source may be used at any one time.

**Environmental:** -30°C to +60°C ambient.  
Temperature code: T5



# Enclosure Requirement

Front and Rear sections are made of R/C (QMFZ2), Chi Mei Corp., cat no. PC-110, rated minimum V-2, 125 C (RTI). 1.6 mm thick (nominal). Secured together by screws.

## Installation and operating Instructions

Suitable for use in Class I, Division 2, Groups A, B, C, D hazardous locations, or nonhazardous locations only.

These devices are open type devices that are intended to be installed in a tool only accessible enclosure that is suitable for the environment.



### **WARNING - EXPLOSION HAZARD**

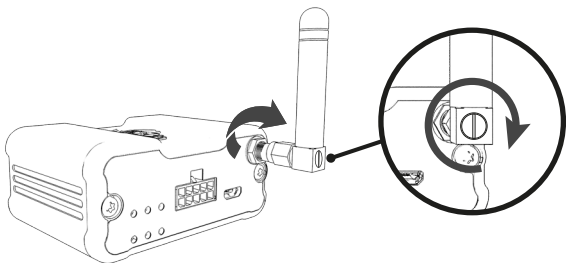
Do not disconnect equipment while the circuit is live or unless the area is known to be free of ignitable concentrations.

The USB port may only be used for supplying power to the equipment during installation and set-up within non-hazardous location. The USB port and its associated interconnecting cable shall remain inaccessible within the hazardous location.

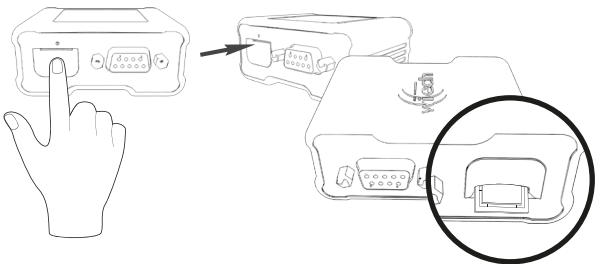
Antennas intended for use in Class I, Division 2 hazardous locations must be installed within the end use enclosure. For remote mounting in an unclassified location, routing and installation of the antennas shall be in accordance with National Electrical Code Requirements (NEC/CEC).

# Starting the WT – GP3 4G LTE

To begin using the modem WT – GP3 4G LTE follow the next steps:

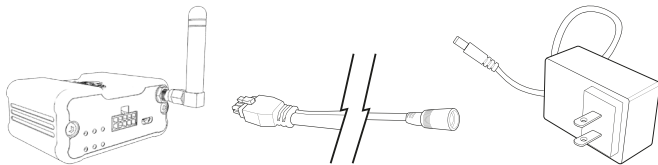


- 1.** Connect the cellular antenna to the SMA connector. The correct way to install it is by screwing it clockwise.

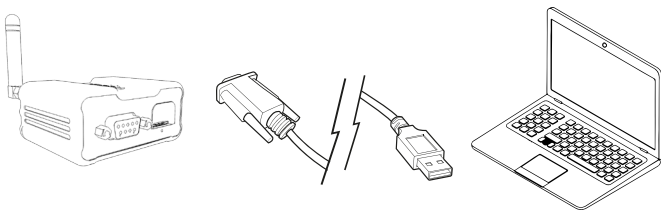


- 2.** Insert the Micro Sim Card in the provided slot. Follow the guide to correctly insert it. The provided slot secures the Micro Sim Card to prevent it from disconnecting.

**3.** Connect the Aux Cable.



**4.** Next, connect the power adapter with the Aux Cable.

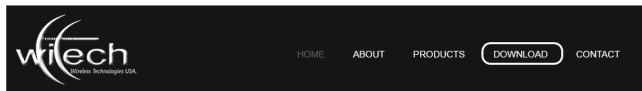


**5.** Connect the USB to Micro USB Cable to any available USB port in the computer for the modem configuration.

**6.** Run the WT – Config 1.3.7 or recent desktop application. Please download from:

**[www.witechusa.com](http://www.witechusa.com)**

Once you have been in Witech USA website, select the option **Download** to enter to the downloads section.



If you already have an user with Witech USA, select the **Login** option,. If not, you have to sign up. For that press the button **Register**.



To download an application or firmware please sign in on our website

**Login**

**Register**

With the successful registration, a message like below appears. Search in the inbox of the account used for the register and click on the activation link that you will have received.

### Message



Your account has been created and an activation link has been sent to the email address you entered. Note that you must activate the account by selecting the activation link when you get the email before you can login.

Now with your **username** and **password** you can make the registration clicking on the **Register** button. Type the needed data and click **Log In**.


Once logged in, you have the options for download Software or Firmware. For this case, click on **Software**.

## DOWNLOAD

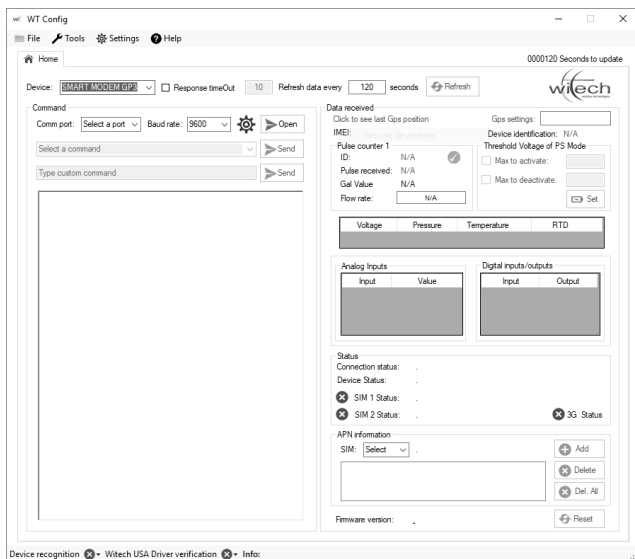
**SOFTWARE**



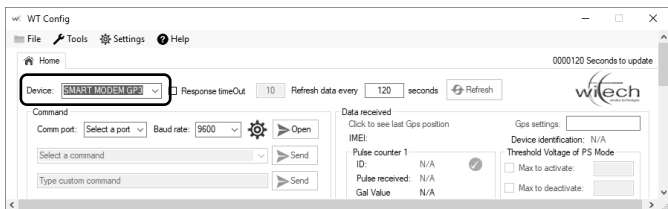
Select the software for install **WT Config** and click in the **Download** button. Your application should download immediately. The installation process is friendly, you will have a guide during all the process.

SOFTWARE		
 Field Manager	<a href="#">Details</a>	<a href="#">Download</a>
<input checked="" type="checkbox"/> WT Config	<a href="#">Details</a>	<a href="#">Download</a>
<input type="checkbox"/> SISTEGO-v1.0.9.apk	<a href="#">Details</a>	<a href="#">Download</a>
<input type="checkbox"/> Gateway	<a href="#">Details</a>	<a href="#">Download</a>
<input type="checkbox"/> NOVO Mobile	<a href="#">Details</a>	<a href="#">Download</a>

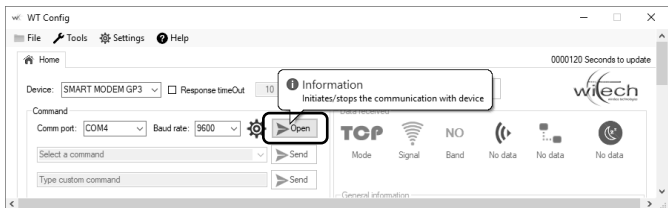
All WT – GP3 4G LTE modem configurations can be accessed through this application; update firmware, establish connections, between other functionalities.



## 7. Choose SMART MODEM GP3 in the Device section.

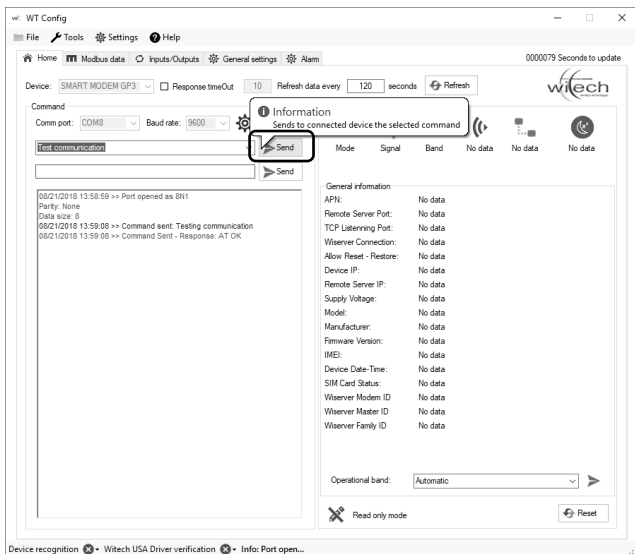


8. At this point, please know the **COMM port** that the computer assigns to the modem when it connects via USB. With this information, go to the **Command** section and select the correct port and pay no attention to the **Baud Rate** value (given is connected via USB) click the button **OPEN** in order to gain access to the modem.





9. Once the port has opened (in this case COM8), if everything is correct the screen will show and notify the type of parity; the data size and its configuration.



It is recommended to send the Test Port communication command to make sure there is communication with the modem.

**10.** By pressing the Refresh button located in the top right corner, all data will be updated in the General Information box – all configuration information can be viewed here.

The screenshot shows the WT Config application window. The title bar reads "wt: WT Config". The menu bar includes "File", "Tools", "Settings", and "Help". The main interface has a top navigation bar with "Home", "Modbus data", "Inputs/Outputs", "General settings", and "Alarm". Below this, the "Device" is set to "SMART MODEM GP3", with "Response timeOut" at 10 and "Refresh data every" at 120 seconds. A "Refresh" button is highlighted with a red box and a callout bubble that says "Information Initiates/stops the update information process".

The interface is divided into several sections:

- Command:** Includes "Comm port: COM5", "Baud rate: 9600", and buttons for "Send" and "Send" (with a custom command field).
- Data received:** Shows "TCP Mode" as "NO" and other status indicators like "Signal", "Band", "Echo On", "Single", and "Normal".
- General information:** A list of device parameters including APN, Remote Server Port, TCP Listening Port, Wswever Connection, Allow Reset - Restore, Device IP, Remote Server IP, Supply Voltage, Model, Manufacturer, Firmware Version, IMEI, Device Date-Time, SIM Card Status, Wswever Modem ID, Wswever Master ID, and Wswever Family ID.
- Operational band:** A dropdown menu currently set to "Automatic".
- Buttons:** "Read/Write mode" and "Reset" buttons are located at the bottom right.

The bottom status bar shows "Device recognition" (with a signal icon), "Witech USA Driver verification" (with a checkmark icon), and "Info: Port open..." (with an info icon).

# WT – GP3 4G LTE as Server TCP

From factory, the WT – GP3 4G LTE is set up by default as Server TCP. Nevertheless, a few configurations must be done in order for this process to be executed correctly: *APN and Listening Port*.

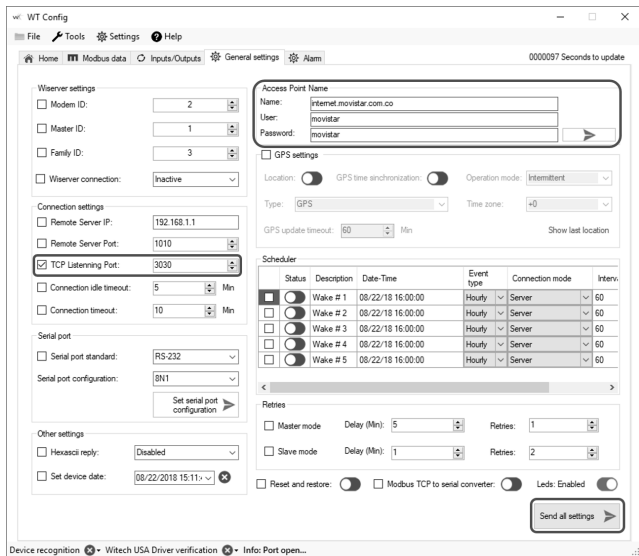
This type of parameters can be configured in the **General Settings Tab**.

**1.** In the **Access point name** section, the Sim Card operators APN can be configured. Make sure to correctly type the **Name, User, and Password**.

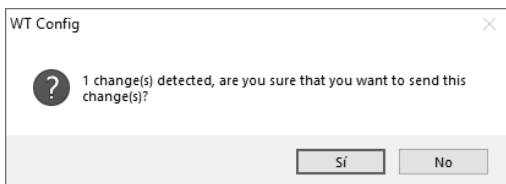
To set these parameters, please send the changes by clicking on the green triangle in the bottom right corner.

**2.** To configure the TCP Listening Port, go to the **Connection Settings tab** and select the **TCP Listening Port** parameter and type it in or use the arrows to configure the correct value.

To send these changes, click on **Send All Settings** in the right bottom corner. When clicking this button, all parameters that have been chosen will be sent to the modem.



A pop-up notification window will appear requesting to confirm these changes.



At the Home tab, you can verify that all changes were successfully made and that the modem is already configured with that Listening Port.

```
08/22/2018 15:09:45 >> Command sent: Set device APN
08/22/2018 15:09:45 >> Command Sent - Response: AT+APN=
1,"internet.movistar.com.co","movistar","movistar" +APN:
1,"internet.movistar.com.co","movistar","movistar"
```

OK

Please Wait: Setting Server...

LISTEN:100.69.222.213/3030:TCP

-- AT Command Ready --

## WT – GP3 4G LTE as Client TCP

The first step for the modem WT – GP3 4G LTE to work as Client TCP is to configure it as Server TCP; as described in the previous section.

Once the APN and TCP Listening Port have been configured, and with this, a successful connection to the Sim Card Operator network.

Next, two parameters are needed in order to make a call/connection as client TCP: the server IP Address (**Remote Server IP**) where the connection is directed to and the Listening Port (**Remote Server Port**).

Please follow the following steps to quickly establish a connection a client TCP:

1. Click on the **Home** tab and look for the **Type custom command** section. In this section you can type in valid commands for the WT – GP3.
2. Type in **ATDRemoteServerIP/RemoteServerPort** and click **Send**.

If the Remote Server is listening and all validations between IP are accepted by the network, it will successfully connect. This can be viewed when the message **CONNECTED** appears.

The screenshot shows a serial terminal window titled "Command". At the top, it displays "Comm port: COM8" and "Baud rate: 9600" with a gear icon for settings and a "Close" button. Below this, there are two "Send" buttons. The first button is labeled "Test communication" and the second is labeled "ATDT190.242.118.154/9006". The terminal output area shows the following text:

```
08/22/2018 17:11:38 >> Command sent: ATDT190.242.118.154/9006
08/22/2018 17:11:48 >> Command Timeout - Response:
ATDT190.242.118.154/9006 CONNECTED
08/22/2018 17:11:49 >> Command Sent - Response: TEST OK
```

**Note:** the WT – GP3 4G LTE has been designed in order to offer multiple functionalities that are not included in this quick set-up guide.

For any other type of connections like client TCP; alarm calling, events and/or automatic reports, the values of the Listening Port and Remote Server IP can be configured in the **General settings** tab, **Connection Settings** section, **Remote Server Port** and **Remote Server IP** parameters.

The screenshot shows the 'WT Config' web interface. The top navigation bar includes 'File', 'Tools', 'Settings', and 'Help'. Below this, there are tabs for 'Home', 'Modbus data', 'Inputs/Outputs', 'General settings' (which is active), and 'Alarm'. The main content area is divided into several sections:

- Wiserver settings:** Contains four rows, each with a checkbox and a field:
  - Modem ID:  Field: 2
  - Master ID:  Field: 1
  - Family ID:  Field: 3
  - Wiserver connection:  Field: Inactive
- Connection settings (highlighted with a red box):** Contains four rows, each with a checkbox and a field:
  - Remote Server IP:  Field: 192.168.1.1
  - Remote Server Port:  Field: 1010
  - TCP Listening Port:  Field: 3030
  - Connection idle timeout:  Field: 5 Min
  - Connection timeout:  Field: 10 Min
- Access Point Name:** Contains three rows, each with a label and a field:
  - Name: Field: inter
  - User: Field: mov
  - Password: Field: mov
- GPS settings:** Contains two rows:
  - Location:  Field: [Toggle]
  - Type: Field: GPS
- Scheduler:** Contains a table with columns for 'Status' and 'De'.

# We want to help!

Our team is available for all technical support. Please visit our website or call us at any time:



**Phone:**

+1 561 883 8130



**Business Hours:**

8:00 a 17:00 (UTC-06:00)



**E-mail:**

info@witechusa.com



**Website:**

<http://www.witechusa.com/>







Wireless Technologies USA  
Witech USA Corp

20283 State road 7, suite 400  
Boca Raton, FL 33498  
United States of America  
Phone: (561) 883 8129  
[www.witechusa.com](http://www.witechusa.com)