

Activating your USRobotics Cellular Modem or Gateway

Retail SIMs

Retail SIMs are readily available but are designed for consumer use and may not include features required for business use. There are some features to take into consideration: **data pooling, static IP,** and **security.**

- Most retail carriers do not offer data pooling, but MVNO subscribers can aggregate data across their account and therefore can utilize smaller, less expensive data plans while still having access to larger amounts of overall data.
- Many M2M solutions such as remote management and out of band remote diagnostics are mobile terminated and may require a static IP, which may not be available from most retail carriers.
- Finally, security is very important and requires Internet Tunnels and in some cases additional encryption levels on a VPN, which are not available from retail carriers.

To learn more about our data rate plans and services or to sign up for services with Telit's IoT Connectivity and receive USR's special rates, just give USRobotics Client Services a call at 1 (866) 944-3861 and they will help you weed through all the details and assist with the process of getting service.

Already have a wireless provider?

For customers that may require different solutions or may already have a partnership in place, the USR modems and gateways can easily be configured for each provider.

For CDMA service with our wireless gateways activation should occur automatically if the service plan has already been associated with the device (based on the MEID). For GSM service the modems or gateways can be set to work with any GSM based network by verifying or changing the APN.

Basic Steps for GSM activation and installation:

1. Set up a wireless data account with a network carrier or MVNO. Each carrier is different and may only offer GSM, CDMA, Satellite, etc. Some applications may also require additional services like higher level of encryption of VPN Tunnels, Static IP Addresses, Persistent connectivity (through modem or through service), or data pooling. See List of main M2M MVNOs above to compare. USRobotics recommends Telit's IoT Connectivity and can help facilitate the process of acquiring an account and make the process quick and simple.
2. Acquire SIM Card
3. Install SIM Card into the modem or gateway
4. Activate SIM Card
5. Configure modem or gateway. You may need to program the Access Point Name (APN).

Changing the APN/IP

USR3513/USR803513 4G LTE Cellular Gateway

Go to 192.168.10.250 and log into the embedded GUI. Click on the "Network" tab on the top menu bar and select **WAN**. On the WAN page, with Mode set to WWAN, select the radio firmware for the wireless service provider that you are using. Enter the APN into the Access Point field and username and password if supplied. Click Save.

Refer to the Gateway User Guides at <https://www.usr.com/support/3513> for more information regarding data connections and configuration.

USR3510/USR803510 Cellular Gateway

Go to 192.168.1.1 and log into the embedded GUI. Click on the "Interfaces" tab on the top menu bar and select 3G connection. In the "General" section, select the radio firmware for the wireless service provider that you are using and save changes. The network settings will populate automatically for many SIM cards. Check the settings of the APN, Username, and Password. Update if appropriate and save changes.

Refer to the Gateway User Guides at <https://www.usr.com/support/usr3510/> for more information regarding data connections and configuration.

USR3500 Cellular Modem

Enter **AT+WOPEN=1** to start the Courier M2M application. A start-up banner will display. Use **AT+WOPEN=0** to stop the application.

```
Lib Version 1.9.1
Courier M2M Wireless Device
Application Started
```

To use IP data services, you need to configure an APN. Your cellular account needs to have data services, and the cellular provider must provide you with an APN string. * For this example "**m2m.apn.com**" will be used, replace this with the string provided by your cellular provider.

Enter **AT\$CGDCONT=1,m2m.apn.com** to set the APN.

Use **AT+CGREG?** to verify GPRS registration.

```
AT+CGREG?
+CGREG: 0,1
OK
```

A response with 0,1 indicates that your device is registered on the GPRS network. A response of 0,0 would indicate not registered. Once you are registered, Courier M2M will automatically activate a PDP context. Enter **AT\$IP** to verify the device's IP address.

```
AT$IP
$IP: "",0,"203.0.113.1"
OK
```

Refer to the Courier M2M Application Guide at <https://www.usr.com/support/usr3500/> for more information regarding data connections.