

Application Note

Activating your ACM5000-G on the AT&T Network using the PWS Wireless Data Device Activation System

Introduction

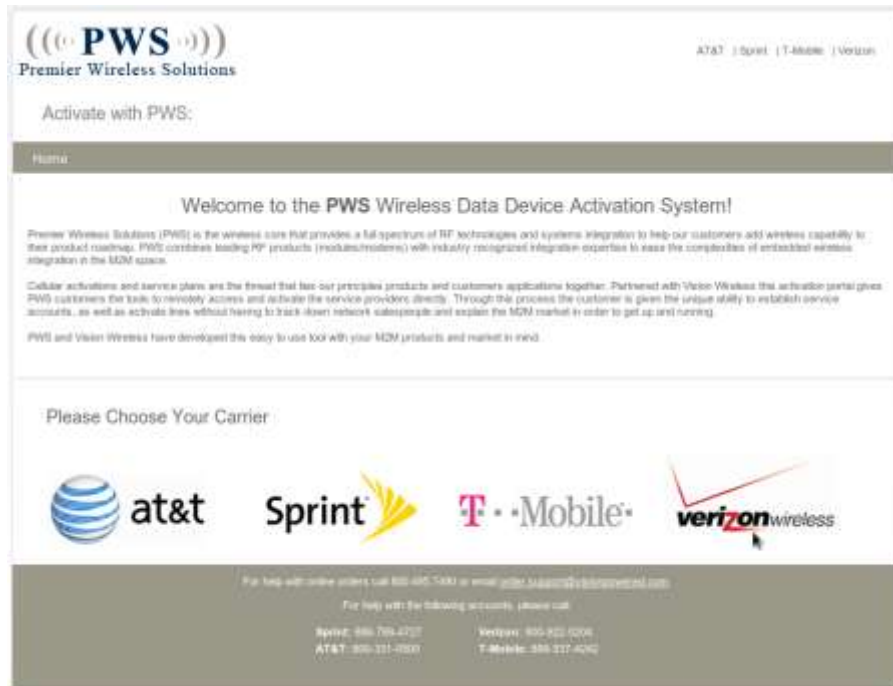
Opengear 3G cellular enabled appliances are configured by default for operation on GSM networks with roaming worldwide. GSM networks operate in 850/900/1900/2100 MHz frequency bands and Opengear's appliances support GPRS (80kbps – 236Kbps), UMTS (384Kbps), HSDPA and HSPA (7.2M down/5.76M up) coding and air speeds. These wireless products by default work in packet switched (PSD) mode across the public Internet or telco managed IP-WANs.

This guide walks through using an ACM5004-G 3G Cellular enabled appliance with the AT&T network in the USA and configuring it online using the **Wireless Data Device Activation System** provided by **PWS (Premier Wireless Solutions)**.

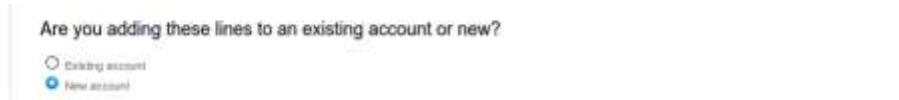
Creating a new AT&T Corporate Account online

1. Select **AT&T** as your carrier.

Navigate your web browser to <http://pws.visionpowered.com/carriers.html> and click on **AT&T**. This will start the ordering process where you will be prompted for the new account line preferences.



- Specify if you need a new account or want to add a line to an existing account.



Are you adding these lines to an existing account or new?

Existing account

New account

Note that if you are adding a line to an existing account you will need to be authorized by **AT&T** to do so and will be required to enter the existing account details before the order is finished.

- Select a Corporate Account.



Is this a corporate or individual account?

Corporate account

Individual account

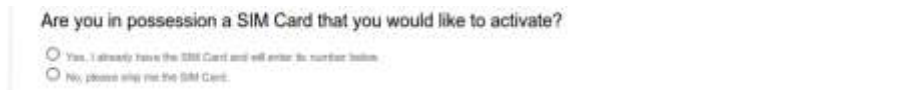
- Specify the number of Opengear devices / lines needed.



Enter count of devices: or Upload Spreadsheet:

- Ordering a SIM Card

If you already have a SIM Card you want to use with the Opengear select “Yes, ...”, you will need to provide the IMEI number for the SIM card in a later step. To have a SIM card shipped to you select “No, please ship me the SIM Card” and the corresponding IMEI will be automatically allocated to you.



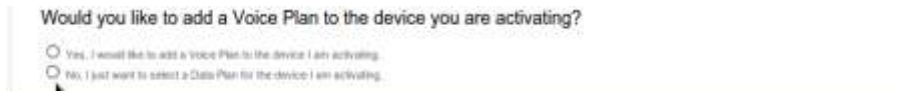
Are you in possession a SIM Card that you would like to activate?

Yes, I already have the SIM Card and will enter its number below.

No, please ship me the SIM Card.

- Adding a voice plan.

If you are planning on using the ACM5000-G for IP access only then the voice plan will not be required, be sure to read details of individual plans before you commit as subtle feature such SMS and Email attachments may not be included in your usage.




Would you like to add a Voice Plan to the device you are activating?

Yes, I would like to add a Voice Plan to the device I am activating.

No, I just want to select a Data Plan for the device I am activating.

- Specify the plan details and checkout.

You can now select one of the plans offered by **AT&T** available from **PWS**. Your plan should allow for the expected data usage per month, for example if you plan on running an outbound VPN client from the Opengear device for **Always Up Out-of-Band** access this will consume more of data than sending occasional Email or SMS alerts.

Now Viewing - 

Device	Plan	User Name	IMEI	Provisioned rate code	Comment / Notes (Optional)
1	DataConnect 10MB	opengear	355310030028555	000	

[Add more devices](#) [Click here](#)

Data Plans

AT&T Data Connect Plans (Data Plans for Laptops and Mobile Broadband Cards)

Plan	Usage	Retail Cost	Year Cost
DataConnect 10MB	10MB	\$20.00	\$20.00
DataConnect 5GB	5GB	\$60.00	\$60.00
DataConnect Pooled - 10MB	10MB	\$23.00	\$23.00
DataConnect Pooled - 50MB	50MB	\$44.00	\$44.00
DataConnect North America	5GB Domestic/100MB Can-Mex	\$109.00	\$109.00
DataConnect Global 100 MB	5GB Domestic/100MB International	\$136.00	\$136.00
DataConnect Global 300 MB	5GB Domestic/200MB International	\$226.00	\$226.00

AT&T Business Connect - Telemetry Plans (Telemetry Plans)

Plan	Usage	Retail Cost	Year Cost
Telemetry Connect - 1MB	1MB	\$4.00	\$4.00
Telemetry Connect - 2MB	2MB	\$4.00	\$11.00
Telemetry Connect - 3MB	3MB	\$13.00	\$13.00
Telemetry Connect - 4MB	4MB	\$16.00	\$13.00

[help](#)

An IMEI (International Mobile Equipment Identity) corresponding to the Opengear device will need to be provided. This can be located on the Serial Label underneath the device, or via the web **Management Console** → **Status** → **Statistics** → **Cellular** under **Hardware Information**.

8. Activating with PWS.

Premier Wireless Solutions

Activate with PWS:

Home | Plans | Coverage | Terms | Support

Restart Order

Welcome to the PWS Wireless Data Device Activation System!

Premier Wireless Solutions (PWS) is the wireless core that provides a full spectrum of IP technologies and systems integrator to help our customers add wireless capability to their product roadmap. PWS combines leading RF products (modems/modems) with industry recognized integration expertise to ease the complexities of embedded wireless integration in the M2M space.

Cellular activation and service plans are the thread that ties our premier products and customer applications together. Partnered with Vision Wireless this activation portal gives PWS customers the tool to remotely access and activate the service providers directly. Through this process the customer is given the unique ability to establish service accounts, as well as activate lines without having to break down network subaccounts and explore the M2M market in order to get up and running.

PWS and Vision Wireless have developed this easy to use tool with your M2M products and market in mind.

New Corporate Account Set Up
Please enter the following information to set up an additional line on your account.

Contact Information

Company Name: Billing Contact First Name:

Billing Contact Last Name: Tax ID (TIN/EIN):

Business Number: Alternate Phone:

Billing Contact Email:

Billing Information

Billing Address 1: Billing Address 2:

Billing City: Billing State:

Billing Zip:

help

After entering the appropriate billing details checking out you will be notified via email of the status of the order. Please allow 1-2 business days for the activation of your new line.

9. Enabling and using the Internal 3G modem as an **Always on Out-of-Band** connection.

- Navigate to the Opengear web-based **Management Console** → **System** → **Dial** → **Internal Cellular Modem** Tab.
- Select **Enable** and either leave **Phone Number** blank or set it to **99**1#** then click **Apply** to enable your **Always On Out-of-Band** connection. The **Internal Cellular Modem** will now attempt to connect to **AT&T's** 3G network

Internal Cellular Modem

Dial-Out Settings - Always On Out-of-Band

Enable Enable the cellular modem connection.

APN: The access point name.

Phone Number: The telephone to dial to establish the connection, usually in 99**1#.

Username: Optional user name to authenticate the connection.

Password: Optional secret to use when authenticating the user.

CostCode: An optional code used for identification.

Custom Modem Initialization: An optional AT command sequence to enhance the modem.

- To view the current status of your Internal Cellular Modem at any time navigate to the **Management Console** → **Status** → **Statistics** → **Cellular** page.
- For advanced detail and logging you can examine **Management Console** → **Status** → **Syslog**.

Obtaining A Public Static IP Address

The default options on AT&T Data/Data+Voice plans will not allow unrestricted access to your Opendgear Device via the Public Internet. The default APN's reachable will either allocate the Modem a Private IP Address or a Public IP Address which will be restricted from incoming connections. To obtain a publicly reachable Static IP Address you will need access to a custom APN.

One such custom APN that AT&T describes as being "ideal for small businesses seeking a mobile terminated data solution that do not require the vast customization options of a ["Custom APN"](#) is named "i2gold" although historically AT&T's method of providing this service has changed overtime.

For access to this or any other Custom APN, it is recommended that you contact your AT&T Account Systems Engineer (if you have been allocated one) and request access to the "i2gold" APN. You may need to provide your Account Number, Foundation Account Number , the phone number allocated to the Opendgear Device (MSISDN) and the ICCID located on the card the SIM card arrived with. There is an additional monthly fee related to this option.

If you have not been assigned a System Engineer or if you are creating a new account the recommended approach is to:

1. Call AT&T Business Data Services and Laptop Connect 800.331.0500 (24/7 Data Troubleshooting and Network Support)
2. Enter Phone number of Device "XXX-XXX-XXXX"
3. Press Option "0" to speak with a representative
4. Select "Internet and E-mail" or "Laptop Connect and Wi-Fi" option
5. Request access to the "i2gold" APN added to your data plan for that device.