



External GSM Modem for the AKCPro Server

User Manual - 2022





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Introduction

The 4G APS External USB Modem provides global wireless access to your local GSM / GPRS / 4G capable networks. With this modem the computer that the AKCPro Server software is installed on can send out the SMS & Voice Call alerts. These alerts can be activated from the sensors connected to the AKCP base units that have been added to the AKCPro Server.

The 4G External Modem requires the AC power adapter included with the modem. Please insure you connect this prior to setting up the modem on your computer and the AKCPro Server software. The modem also includes the external antenna and will not work without this connected.

Modem connection & setup guide

What you will need:

1. **External USB Modem (do not connect before installing the drivers – see below)**
2. **Modem Drivers (see below for download link)**
3. **AC Power Adapter (included)**
4. **External Antenna (included)**
5. **USB to USB connection cable (included)**
6. **Local GSM Providers SIM Card (see below)**

You will need to purchase a SIM card from your local mobile service provider that you will install in the USB modem. This SIM card will provide the mobile connection that enables the computer that the AKCPro Server software is installed on to send the SMS or Voice alerts to your mobile phones as noted above.

Note on SIM: If the SIM card you purchased requires a PIN number, then you will need to contact your service provider and have them provide you with the instructions for disabling the PIN code on the SIM card. Otherwise, it will not work.

It is always a good idea to test the SIM card in mobile phone to ensure the SIM is working properly before installing the modem on your computer.

To confirm compatibility in your country, and for a comprehensive listing of the GSM \ GPRS networks available including the frequencies that they use, visit this link :
<http://www.mobileworldlive.com/maps/>



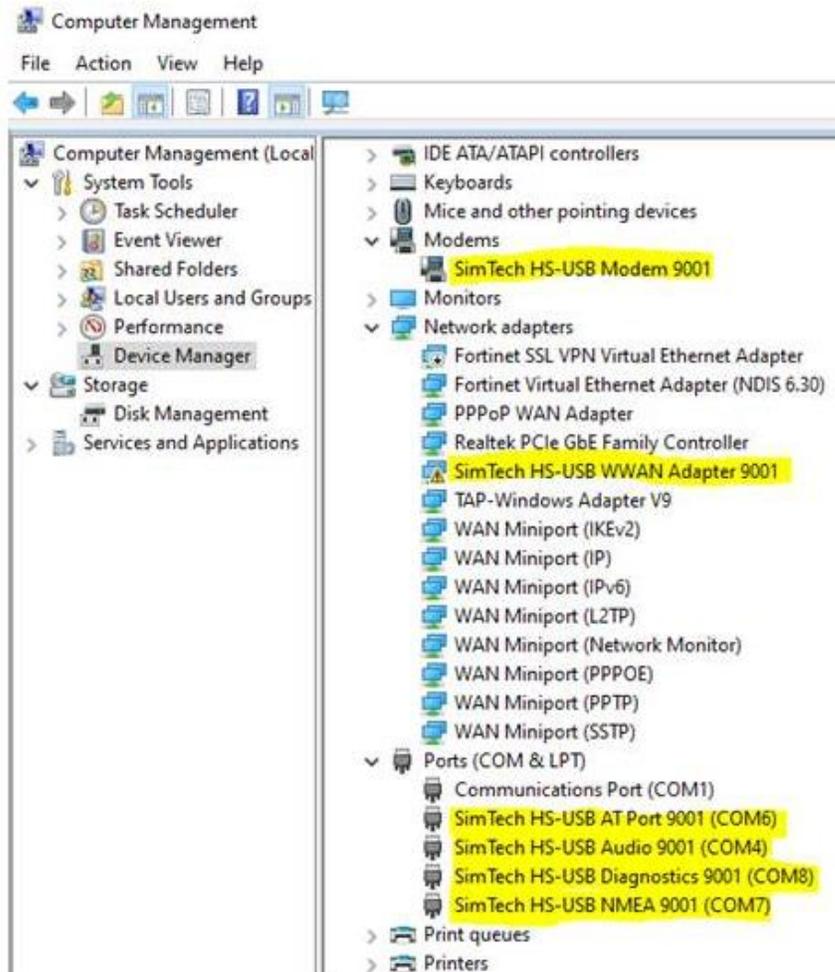
Mobile Service Provider SIM Card

4G modem driver (updated)

We've received a new driver package from the supplier.
This should contain drivers for all Windows OS and is a setup.exe with wizard:

www.akcp.in.th/downloads/Modem-Fastrack4G/SIM7000&SIM7100&SIM7500&SIM7600DriverInstall_V1.02.zip

We recommend that prior to installing this driver package, if you have an earlier driver version installed you should remove the existing driver and all modem/port devices from Device Manager (all ports and modems associated with the USB modem):



After that, stop the APS service, then you can run the driver installer. You can start APS service again after the drivers are finished installing. If you do not, APS will be unable to use the modem until it's restarted.

How to stop and start APS service

The easiest way is to find APS from the Windows Services manager and stop it like any other Windows service.

Or you can use the APS ServerManager program, and from its menu choose “stop services”. Both the NotificationServer.exe and APS main executable should stop.

Then to restart APS, just do it the same way how you stopped it (just do a “start” action instead of “stop”).

Important Note: As noted above we highly suggest not physically connecting the modem to your computer before installing the modem drivers.

If you connect the modem before installing the drivers, Windows will try to find a driver for it. But most likely it will not locate a correct driver & will leave it as an unknown device.

To save time, it's recommended to **install the driver package first**, then it will detect and install the modem without delays when it's connected.

Connecting the Modem

1. First insert your tested GSM SIM card into the modems SIM card slot located on the right-hand side of the modem case.
2. Next connect the modem's external antenna to the right-hand side of the modem case.
3. Next connect the AC power adapter to an AC UPS and then to the modems power jack on the left-hand side of the modem case.
4. With the power to the computer turned on and the modem powered up, then connect the USB cable to your computers USB port.

Important Note: Front panel USB ports usually provide less power than the ones in the back. We advise you to connect the USB modem to one of the back ports of your machine, especially if you're using a USB extender cable.

The modem doesn't have a high-power requirement, but it would provide a better performance in one of the back ports.



The modem then should be successfully recognized by the Windows OS and installed. You can check the Windows device manager again to make sure.

APS settings for voice calls

Telephone Call Action

Notifications / Actions / Telephone Call Action

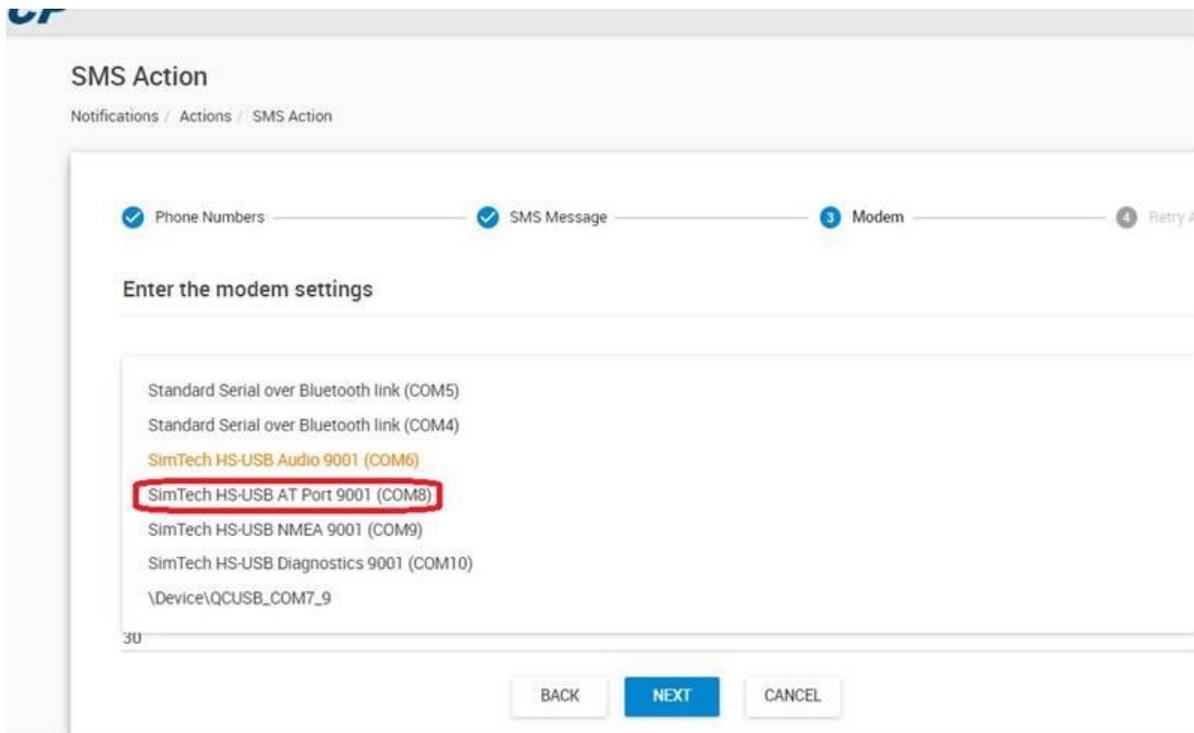
The screenshot shows a four-step progress bar at the top: 1. Telephone Numbers (checked), 2. Voice Modem (active), 3. Sound Configuration, and 4. Retry Action. Below the progress bar, the heading 'Enter the modem settings' is followed by three dropdown menus: 'Voice Modem Port' set to 'SimTech HS-USB AT Port 9001 (COM4)', 'Voice Modem Port Speed' set to 'Auto', and 'Voice Modem Chipset' set to 'SimCom 3G/4G'. At the bottom are three buttons: 'BACK', 'NEXT' (highlighted in blue), and 'CANCEL'.

The chipset has to be set to SimCom 3G/4G and the port speed can be left at “auto”. Select the “AT port 9001” from the list, when choosing the modem device.

The COM port number could change, but the name “AT port 9001” will always be the same. On this screenshot the “AT port 9001” is on COM4.

APS settings for SMS

The screenshot shows a four-step progress bar at the top: 1. Phone Numbers (checked), 2. SMS Message (checked), 3. Modem (active), and 4. Retry Action. Below the progress bar, the heading 'Enter the modem settings' is followed by four input fields: 'Modem Port' set to 'SimTech HS-USB AT Port 9001 (COM8)', 'Port Speed' set to 'Auto', 'Initialization String' (empty), and 'Timeout' set to '30'. At the bottom are three buttons: 'BACK', 'NEXT' (highlighted in blue), and 'CANCEL'.



Select the “AT port 9001” from the list, when choosing the modem device. The COM port number could change, but the name “AT port 9001” will always be the same. On this screenshot the “AT port 9001” is on COM8. No extra init string is necessary for this modem. The port speed can be left at “auto”.

Important notes:

The modem can stop responding if you send the testing command or SMS or voice call action too quickly too many times.

The modem needs time to process a request (it is a slow serial device), you would need to give at least 10-15 seconds between each SMS/voice action or test action.

To reset the modem, unplug and re-plug it, then execute the SMS/voice actions one at a time and at least 10 seconds between each.

This concludes the Modem Setup Manual.

Please contact support@akcp.com if you have any further technical questions or problems setting up your modem or your alerts.

Thanks for Choosing AKCP!