

AT242 Quick Start Guide

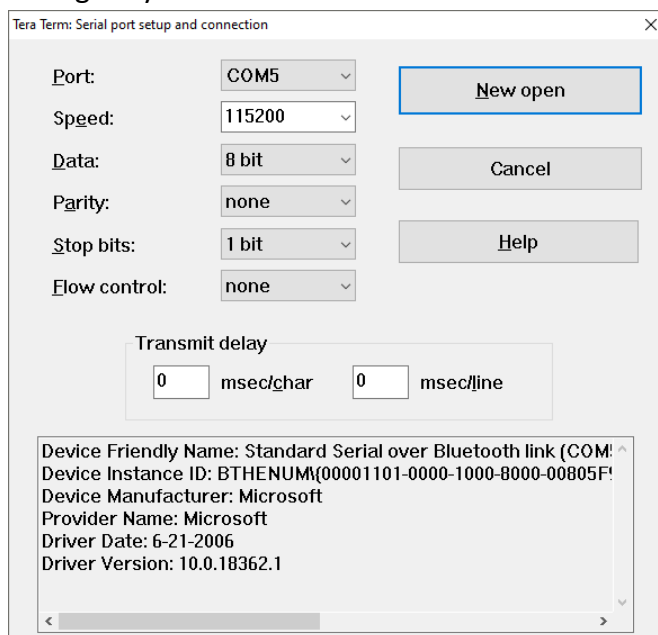
1. Install an ASCII Terminal Application (on your PC)

An ASCII terminal is useful for initial testing and configuration. If you already have one, skip to step 2.

- a. We recommend TeraTerm, which can be downloaded from our server, here:

https://astratelematics-my.sharepoint.com/:f:/p/phil/EiffxOSnjX1DiimDbvB5EHkBdk_nkauL34TKMLzLp4v4Sg?e=d3lilo

- b. Once downloaded, install TeraTerm and open the application
- c. Select RS232 session type
- d. Select *Setup* and then choose *Serial Port* from the drop-down options
- e. Configure your serial connection as follows:



- f. Choose the *Port* to suit your available COM ports on your PC. This will usually be COM1 if you have a built in RS232 port. If using a USB-RS232 adapter, go to the Windows® Device Manager and check which COM port has been assigned to your USB adapter (note: the assigned COM port will change if you plug into a different USB socket on your PC).
- g. Select *Setup* and then *Save Setup* from the drop-down menu list to save this configuration
- h. Leave the TeraTerm window open whilst you now set up and connect the AT242

2. Check that the battery is fitted and connected:

- a. Each AT242 is supplied with a 510mAh back-up battery, which should be fixed to the PCB and connected as shown below:



- b. Do not attempt to remove the battery from the cover, once it has been stuck down, as prising or bending the battery can result in fire and smoke.

3. Slide the micro SIM into the push-push style holder:

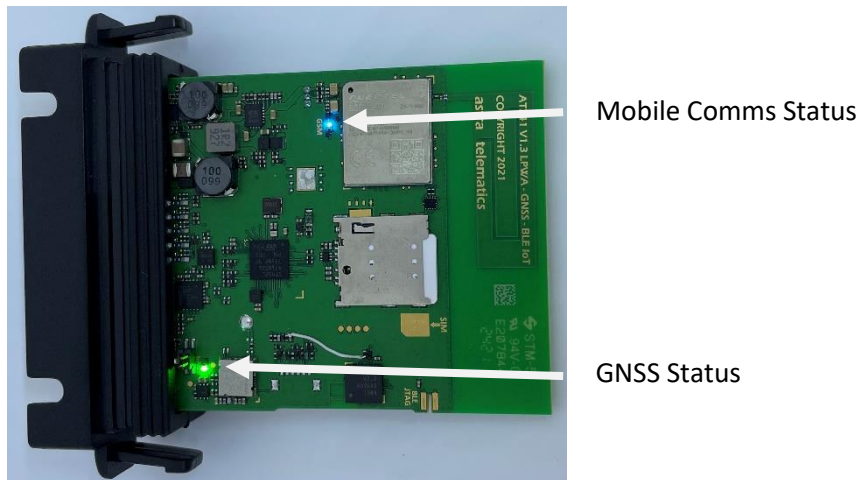
- a. Note the orientation (as below), and push in until the SIM clicks into place



- b. The AT242 will now power up
- c. To remove the SIM, push again, until the SIM springs out

4. Check status LEDs

- a. Place the AT242 somewhere with reasonable view of the sky in correct orientation (PCB side with GPS patch antenna & battery facing to the sky) for a minute or two and then check the status LEDs as below:



- a. During normal operation the LEDs should:

GNSS:	Constant ON	Searching for initial fix
	Double flash every sec	GNSS 3D navigation
	Flash @ rate 1 per 5 sec	Lost GPS navigation
GSM / LPWAN:	200mS ON / 1800mS OFF	GSM ON
	1800mS ON / 200mS OFF	GSM registered on network
	Constant OFF	GSM Modem OFF

5. Fit the enclosure cover

- a. Align the AT242 PCB with the slots in the main part of the enclosure and slide in the PCB and end panel assembly until the clips are mated



6. Fit the CB243 cable to the AT242 system connector

- a. The CB243 cable is terminated with numerous Molex MicroFit 3.0 connectors for use with our accessories. The two essential ones for initial set-up, configuration and testing will be:

CB001 3-way power & ignition cable (fused) - connect this to a DC power supply

CB004 DB9 RS232 adapter - connect this to your USB-RS232 adapter

- b. You should now see text scrolling continuously from the AT242 to Tera Term
- c. Connect the power as outlined below:

	+VE Power	-VE Power	IGNITION
CB243 cable (samtec IP68 cable)	black	red	green
CB001 cable (3 way power & ign)	red	black	white

- d. Connect the IGNITION wire to an ignition switched 12/24V circuit, or for testing purposes, just connect this to the +VE side of your power supply to simulate ignition on.

7. Configure Settings

- a. Once the device is running and you can see output text scrolling in Tera Term, you are ready to configure the device by typing or pasting commands into the Tera Term window (note: these commands can be send by SMS also).
- b. Configure your mobile network operator APN settings to suit your SIM using the following commands:

```
$APAD,<your_apn_address>
```

```
$APUN,<your_apn_username>
```

```
$APPW,<your_apn_password>
```

example:

```
$APAD,astra
```

NOTE: for a blank username or password, use the following format:

```
$APUN,NONE
```

```
$APPW,NONE
```

if you don't know the appropriate APN settings for the network operator you are using, many of the standard network APN settings can be found here:

<http://www.taniwaha.org.uk/gprs.html>

- c. Configure your server IP Address (or hostname) and port. This is the destination that the AT242 will deliver data reports via TCP socket connections. The commands are:

```
$IPAD,<ip_address_or_hostname>
```

```
$PORT,<port_number>
```

- d. Select the required reporting protocol (i.e. packet format) using the following command:

```
$PROT,<protocol>[<module-mask>]
```

<prot>	Reporting protocol	
6	Fixed protocol "K"	Legacy - not for new implementations
8	Fixed protocol "M"	Legacy - not for new implementations
14	Fixed protocol "V"	Legacy - not for new implementations
16	Modular protocol "X"	RECOMMENDED for new implementations

please contact Astra Telematics for advice and documentation on the above protocols

- e. Your AT242 is now configured will all the basic essentials for operation. The text output in Tera Term will show details of any errors.
- f. Please refer to the AT242 User Guide and Astra Telematics Command Reference for further details of features and configuration options.