



# PremiumTrack AT1 User Guide



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## 1 Copyright and Disclaimer

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## 2 Product Overview

The AT1 is a magnetic GPS tracker developed by PremiumTrack and newly released in 2016. It is mainly used to track goods, valuables, equipment, and other assets.

Two internal magnets make the tracker attached to the vehicle body and free of installation. If the tracker drops, a drop alarm will be generated.

The unique rugged design of the shell ensures that the tracker is water resistant, dustproof, shockproof, and durable. The standby time can last more than 365 days.

## 3 Product Function and Specifications

### 3.1 Product Function

- GPS + GSM dual-module tracking
- Power magnet, easy to install
- Drop alarm
- Long standby time
- IP66 water resistant
- Embedded vibration sensor
- Tracking on demand, and by time interval and distance
- Enter/Exit Geo-fence alarm
- Get a location by call
- Rugged/shockproof design
- Direction change report
- Speeding alarm
- External GPS antenna disconnect alarm
- Heartbeat report

### 3.2 Specifications

Item	Parameter	Specifications
Outer case	Dimension	105 mm x 75 mm x 45 mm
	Material	ABS

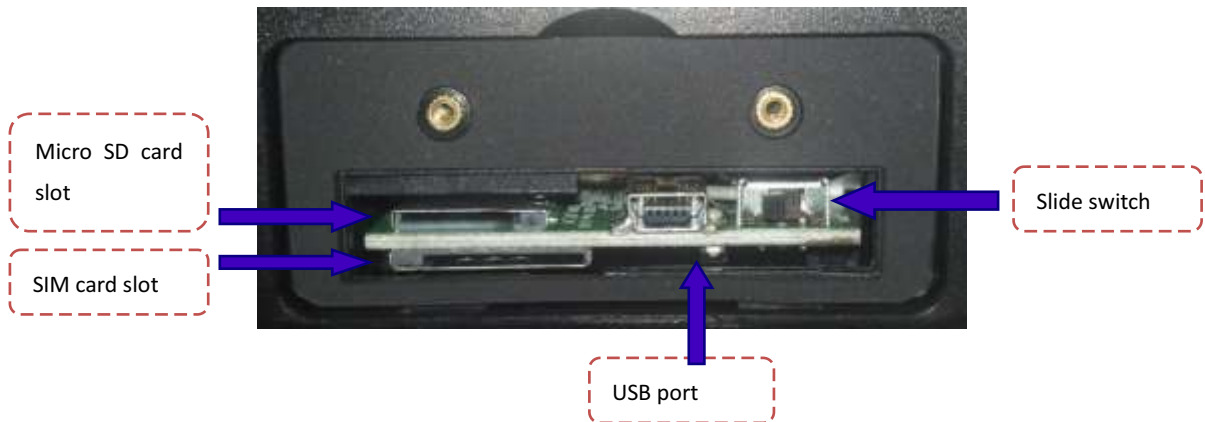
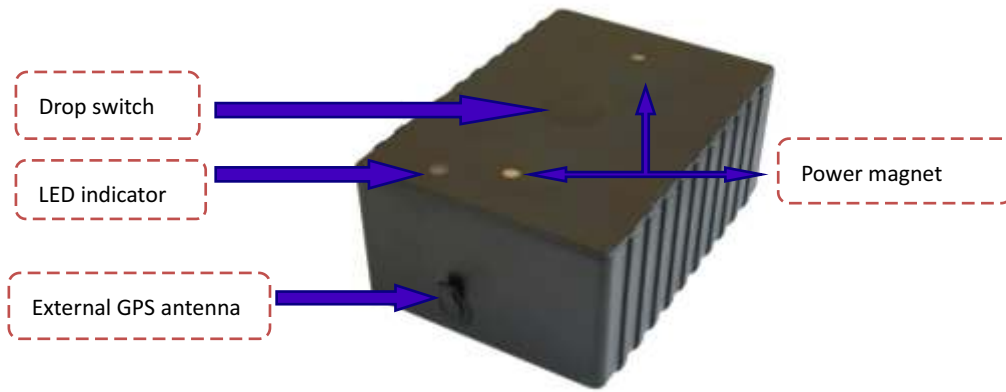
	Water resistance	IP66
Power consumption	Working voltage	3.7 V
	Average current	50 mA
	Standby current	0.7 mA
	Internal battery	7400 mAh/3.7 V
	Working hour	Consecutive working hours: > 120 hours Standby time: > 8760 hours
GSM	Frequency band	850/900/1800/1900 MHz
	Network	GSM/GPRS
	Antenna	Internal antenna
GPS	Speed	0.1 m/s
	Tracking sensitivity	-162 dBm
	Positioning time	Cold start < 42s, hot start < 3s, recapture time < 2s
	Positioning accuracy	10m, 2D RMS
	Satellite receiving channels	56 channels
	Antenna	Internal/External antenna
Ambient environment	Operating temperature	-15°C to 65°C
	Storage temperature	-25°C to 70°C
	Humidity	5%–95% non-condensing
Weight	322g	
Sensor	Internal 3D acceleration sensor (used to determine movement, vibration and non-movement.)	
Memory	8 MB flash (8,192 GPRS caches and 100 SMS caches)	
LED indicator	LED indicators showing Power, GPS, and GSM status	

## 4 AT1 and Accessories

<b>Standard Accessories</b>	AT1	Travel adapter	Mini USB cable
	Switch sticker		
<b>Optional Accessories</b>	External GPS antenna		

## 5 Panel

### 5.1 Appearance



## 5.2 LED Indicator

Blue Indicator Status	Blue Indicator Description	Blue Indicator Diagram (Unit: second)
Steady on (Consecutive)	The device is charging	
1s on and 1s off (2 cycles within 4s )	The GPS is invalid or the device is being initialized	
0.2s on and 3.8 off ( 1 cycle within 4s )	The GPS is valid	
0.2s on and 0.2s off (10 cycles within 4s , then indicator is steady on )	The battery power is low	
0.2s on and 0.2s off ( 2 cycles within 1s )	The device starts (Press the drop switch 3 times within 5s)	
Steady off (Consecutive)	The device enters sleep mode	
Green Indicator Status	Green Indicator Description	Green Indicator Diagram (Unit: second)
Steady on (Consecutive)	The battery power is full	
1s on and 1s off (2 cycles within 4s )	The GSM fails to be registered or is being registering	
2 times on within 1s, and then 1s off ( 2 cycles within 4s )	The GPRS fails to be connected or is being connecting	
Steady off (Within 4s)	The GPRS connection is complete	
1 time within 4s	The phone is busy	
0.2s on and 0.2s off (2 cycles within 1s )	The device stops (Press the drop switch 3 times within 5s)	

The blue and green LED indicators will alternately blink every 8 seconds.

## 6 First Use

1. Remove the device cover.

Use the mini screwdriver to remove the two screws to release the cover.



2. Insert the SIM card.

Gently push the SIM card into the card slot until you hear a click with its gold-plated contacts facing up.

Note: Ensure that the SIM PIN lock is closed, and the SIM card has sufficient balance and has subscribed the call ID service.

If you want to use the GPRS function, learn about the SIM card GPRS charging first.

Ensure that the device is turned off before replacing the SIM card. Hot plugging is not supported.



3. Charge the battery.

To charge the battery, you can connect the device to the wall charger or a computer through the USB cable. When using the device for the first time, you are advised to turn off the device and then charge the battery fully. When the battery power is full, the LED indicator turns green.

Note: While charging, the device may heat up. This is normal, and this does not affect your device's lifespan or performance. If the battery power is low, it may affect positioning and data transmission. In this way, charge the battery before use.

4. Start the device.

Turn the slide switch to the rightmost position, then press the drop switch 3 times within 5 seconds. The blue LED indicator will blink 0.2s on and 0.2s off, indicating that the device has started. After power-on, wait for 15 seconds to allow the device to complete the power-on self-test (POST) process.

Note: Ensure that the SIM card had properly installed before starting the device.



5. Stop the device.

Press the drop switch 3 times within 5s. The green LED indicator will blink 0.2s on and 0.2s off, indicating that the device has stopped. After the device has stopped, wait for 5 seconds before restarting the device.



6. Install the device cover.

Place the back cover, and tighten the two screws by using the mini screwdriver.

## 7 Quick Start Command

Before normal usage, common parameters must be set either by SMS command or by software.

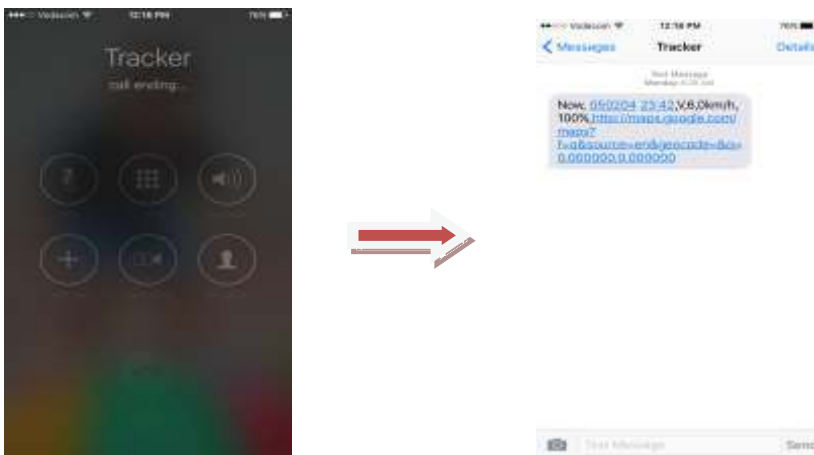
### 7.1 Real-Time Tracking

This section describes how to query the current location of the AT1, ensuring that the GPS is working normally.

Call the SIM card phone number that is used in the AT1 and hang up after the dial tone rings 2-3 times.

Note: If an authorized phone number was set by SMS command A71, only this authorized phone number can call the SIM card phone number and receive device's location information.

An SMS with a map link is received. Click the link to query the location.



SMS example:

Now,072714 02:48,V,16,23Km/h,61%,http://maps.google.com/maps?f=q&hl=en&q=22.540103,114.082329

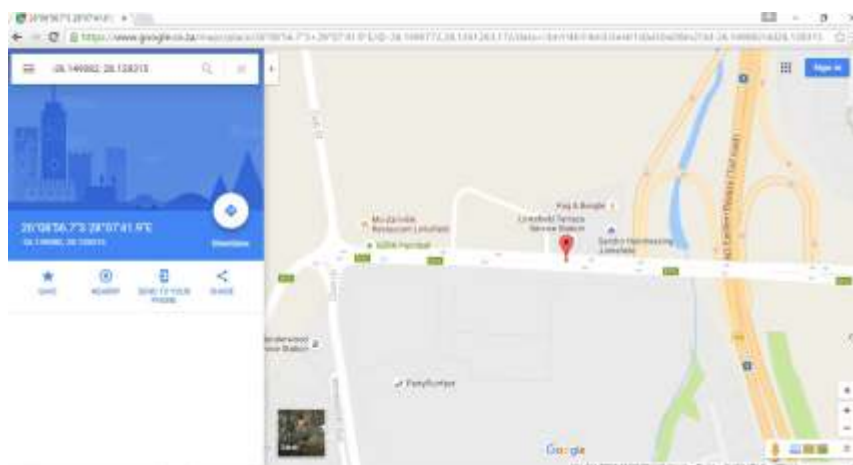
The following table describes the SMS format:

Parameter	Description	Remarks
Now	Indicates the current location.	SMS header: indicates the alarm type.



		<i>Protocol.</i>
072714 02:48	Indicates the date and time in <b>MMDDYY hh:mm</b> format.	None
V	The GPS is invalid.	A = Valid V = Invalid
16	Indicates the GSM signal strength.	Value: 1–32 The larger the value is, the stronger the signal is. If the value is greater than 12, GPRS reaches the normal level.
23Km/h	Indicates the speed.	Unit: km/h
61%	Indicates the remaining battery power.	None
<a href="http://maps.google.com/maps?f=q&amp;hl=en&amp;q=22.540103,114.082329">http://maps.google.com/maps?f=q&amp;hl=en&amp;q=22.540103,114.082329</a>	This is a map link. Latitude: 22.540103 Longitude: 114.082329	None

If there is no valid GPS available, the tracker will reply the most recent valid position, along with GSM LBS information by AGPS. If your mobile phone does not support HTTP, enter the latitude and longitude on Google Maps to query a location.



Note: The default password of the tracker is 0000. The password can be changed by using SMS commands. After the password is changed successfully by using an SMS command, only the authorized phone number can receive SMS reports. The common format of an SMS command is: *Password,Command,Parameter*.

## 7.2 Smart Sleep – A73

This command is used to enable the sleep mode function, prolonging standby time to 8760 hours. In this mode, the scheduled tracking and location tracking functions are disabled.

- SMS text:  
`0000,A73,Sleep level`  
Send the text to the embedded SIM card phone number.  
The device automatically replies to the SMS: `IMEI,A73,OK`. It indicates that the sleep mode is set successfully.
- If the scheduled tracking function is required, disable the sleep mode.

Note:

When the sleep level is **0**, the sleep mode is disabled.

When the sleep level is **1**, the tracker enters the normal sleep mode. The GSM module always works, and the GPS module occasionally enters the sleep mode. If the tracker is inactive (drop/incoming call/SMS/vibration) for 5 minutes, enable sleep level 1. If the tracker is activated (drop/incoming call/SMS/vibration), sleep level 0 is enabled. In the device running mode, sleep level 0 or 1 will be enabled alternatively.

The mode is not recommended for users who set the scheduled tracking at a short interval. This setting will affect tracking integrity

When the sleep level is **2** (default value), the tracker enters the deep sleep mode. If the tracker is inactive (drop/incoming call/SMS/vibration) for 5 minutes, the tracker enters deep sleep mode. In this way, a triggering event (drop/incoming call/SMS/vibration) can wake the device up, and then the device enters working mode. In deep sleep mode, if there is no triggering event (drop/incoming call/SMS/vibration) within 25 minutes, the device will automatically enter super power-saving mode. In this mode, only a drop or vibration event can wake the device up. GPS and GSM modules can be enabled intelligently based on vehicle driving status, which saves power.

In deep sleep mode, the tracker can be woken up when the tracker drops or vibrates. If the tracker is activated (drop/vibration), sleep level 0 is enabled. In the device running mode, sleep level 0 or 2 will be enabled alternatively. In sleep mode, the scheduled tracking and distance tracking functions will be disabled.

Example: 0000,A73,2

Reply: 353358017784062,A73,OK

## 8 Installing the AT1

After the device is attached to the body of the vehicle, the drop switch will be triggered. After 5 seconds, two beeps will sound, indicating that the device has been installed successfully.



Note: If the tracker has not been attached to the vehicle for over 5 seconds, a drop alarm will be generated. After 5 minutes, if no event (incoming call/SMS/vibration) is triggered, the device automatically enters the deep sleep mode. In any mode, the deep sleep mode will be automatically enabled after the drop alarm is generated.

## 9 Safety and Usage Instructions

**Use only PremiumTrack -approved accessories.**

Incompatible accessories may cause serious injuries or damages to your device.

**Handle the battery and charger carefully.**

- Use batteries specified by PremiumTrack and chargers exclusively designed for your device. Incompatible batteries and chargers may cause serious injuries or damages to your device.
- Do NOT place batteries or devices on fire or in heating devices, such as microwave ovens, oven s, or radiators. Batteries may explode when overheated.

**If you have any questions, do not hesitate to email us at [info@premiumtrack.co.za](mailto:info@premiumtrack.co.za).**