

# TKSTAR Water Resistant 4G/GPS Tracker TK905



Working based on existing GSM/GPRS/LTE network and GPS satellites, this product can locate and monitor any movable equipment by SMS, APP and Internet. It has the newest advanced technology of GPS and AGPS dual positioning.

Dim. - 90mm x 72mm x 22mm (3.5" x 2.8" x 0.8")

Weight - 168g

Network - GSM/GPRS/LTE

Band(4GC):

- LTE-FDD: B1/B3/B5/B8
- LTE-TDD: B34/B38/B39/B40/B41
- GSM: 900/1800MHz

Band(4GSA):

- LTE-FDD: B1/B2/B3/B4/B5/B7/B8/B28/B66
- GSM: 850/900/1800/1900MHz

GPS sensitivity - -159dBm

GPS accuracy - 5m

Charging input - DC/5V === 1.0A

Battery - Chargeable 3.7V 5000mAh Li-ion battery

Stand by - 40 days

Time to first fix:

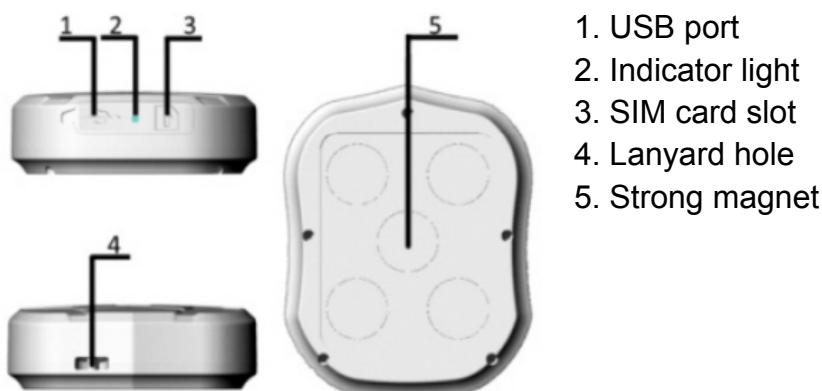
- Cold status 45s
- Warm status 35s
- Hot status 1s

Storage Temperature - -40°C to +85°C

Operation Temperature - -20°C to +55°C

Humidity - 5%–95% non-condensing

## Hardware description



## Indicator light status

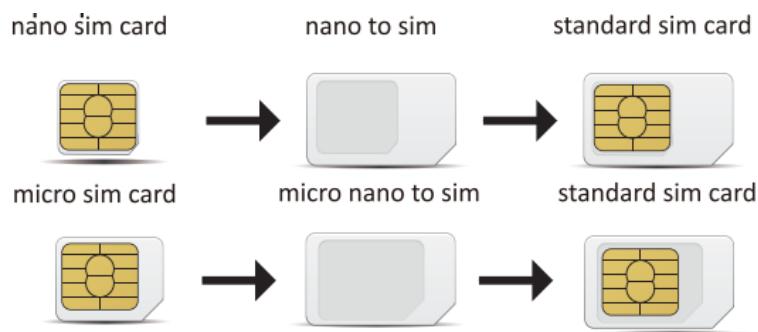
Yellow light (Solid) - No GPRS signal

Yellow light (Flash) - GPRS connection

Blue light (Solid) - No GPS signal

Blue light (Flash) - GPS connection

Buy a normal SIM card (Standard SIM card), register the SIM card and top up with credit.



Note: If you have bought a Nano/Micro SIM card, you will need to use an adaptor to fit in.

## Turn on the device

- Open the rubber cover, insert the SIM card (chip up) to the slot.
- The indicator light is on when the SIM card is inserted.
- The device gets GPS location when there is GPS signal and gets LBS location when there is no GPS signal.
- The device automatically turns off when the SIM card is removed.

Note: Don't turn on the SIM card PIN code.

## SMS tracking

Note: The yellow space is a blank in the SMS command.

Call the SIM card phone number in tracker, you will receive a Google Maps link of position, or sending message "G123456#" to the SIM card phone number in the tracker.

G123456#

lat:22.65655  
lon:114.18573  
Spd:000  
T:13/10/15 15:55  
bat:70%  
ID:8168000010  
<http://maps.google.cn/maps?q=+22.65655.+114.18573>

Admin number setting (After admin number set, all SMS operations to the device are under this number only.)

Command: admin123456 phone number (This phone number is your own mobile phone number, not the SIM card number in the tracker.)

Admin123456 13265790180

admin ok

When the unit is in an over-speed alarm, Shake sensor alarm, or low battery alarm, it will send alarm information to the admin number. (13265790180)

Over-speed Alarm setting:

Command: speed123456 070 (Suppose speed is 70km/h)

speed123456 070

speed ok

When the unit speed is over 70km/h, it will send the message “speed alarm!” to the admin number every 5 minutes.

Over-speed Alarm canceling:

Command: nospeed123456

Reply: nospeed ok

Shake alarm setting

Shock123456

shock ok

Note: Pls keep the tracker being stationary for 5 minutes, this function will work. The tracker will send SMS "sensor alarm!" to the admin number when the unit get shocked.

Shake alarm Canceling:

Command: noshock123456

Reply: noshock ok

Device working mode setting

sleep123456 time

sleep time ok

(Tracker only works for 5 minutes after being woken up, and back to sleep mode, GPS shut off, GSM works in low consumption mode. SMS command, calling tracker can wake up the tracker.)

Sleep by shock sensor mode setting (Factory setting is "Sleep by shock mode")

Sleep123456 shock

sleep shock ok

(No shock for 5 minutes, the tracker will work in "sleep by shock" mode, GPS shut off, GSM works in low consumption. Vibration, SMS, and calling can wake up the tracker.)

Terminal (local) Time Setting (factory setting GMT 0)

Command: timezone123456 local time zone

Reply: time ok

E.g:

timezone123456 +1

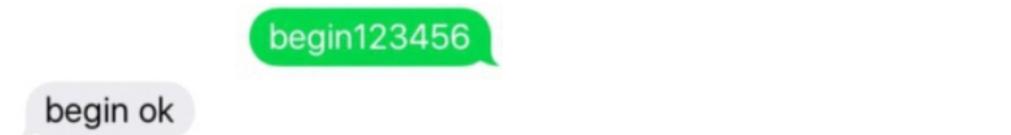
timezone123456 -1

timezone123456 0

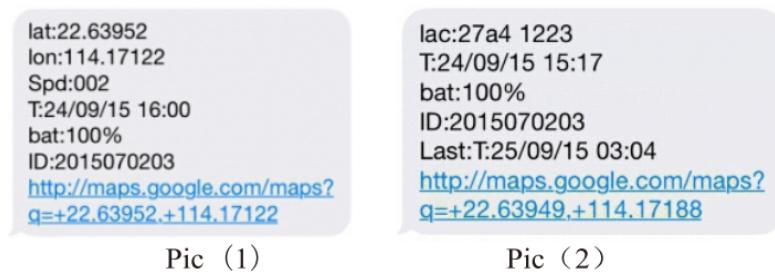
Timezone123456 +1

time ok

Reset hardware



## Explanation of parameters/codes in SMS message



Pic 1: Replied real-time tracking information under GPS satellites signal.

- **Lat:22.63952 lon:114.17122** - Positioning of the latitude and longitude values.
- **Spd:000** - This refers to the device moving speed. The unit is km/h.
- **T:24/09/15 16:00** - real-tracking time, the Default is London time. You can set language and time zones in APP.
- **Bat:100%** - The battery value is between 10% and 100%. Once it is less than 30%, it alarms.
- **2015070203** - Device ID No. to log in APP and platform.
- **Google Link** - This is the link to the Google map showing the position of the device.

Pic 2: Replied LBS tracking information without GPS satellite signal.

- **Lac:27a4 1223** - Real-time LBS positioning data.
- **T:24/09/15 15:17** - LBS positioning time.
- **Bat:100%** - The battery value is between 10% and 100%. Once it is less than 30%, it alarms.
- **Last:T:25/09/15 03:04** - This is the time when the tracker got the last GPS signal.
- **Google Link** - This is the position of the last GPS signal that appeared.

## **Start online tracking**

Set the APN for the tracker, then its online tracking by APP and platform works.  
(Note: If you inserted the correct SIM Card and the device is online on the APP, no need to send the following APN setting commands.)

Every sim card carrier has its own APN content, we have two methods to find out apn content: check sim card carrier on the internet or put sim card into cell phone to find out APN.

Set apn by sending command “apn123456 content”, “apnuser123456 content”, “apnpasswd123456 content” pls note the content is from SIM card carrier, there is small blank after 123456 in every command.

If you want, I can also clean up the English, standardize it for a user manual, or format it for HTML/PDF.

## **Command instruction to set APN**

Set APN (any existing will be replaced) - apn123456 xxxx - apn ok

Set APN username - apnuser123456 xxxx - apnuser ok

Set APN password - apnpasswd123456 xxxx - apnpasswd ok

E.g:

For vodafone mobile SIM card in Germany, we got APN information below.

APN name: web.vodafone.de

APN username: vodafone

APN password: vodafone

Send SMS to set APN below:

1. apn123456 web.vodafone.de
2. apnuser123456 vodafone (no need to set if without apnuser)
3. apnpasswd123456 vodafone (no need to set if without password)

## Applications for Android/IOS

Search "WINNES GPS" in the Apple APP Store/Google Play Store or Scan the QR Code to install the applications on your cell phone.



### Login by IMEI/ID (Only one tracker)

Select "Log in by IMEI/ID" on the bottom of screen

Server: [www.mytkstar.net](http://www.mytkstar.net)

IMEI/ID No.: on the back side of the cover.

Password: 123456

### Login by username

Note: If you have two tracking devices or more, you need to contact the seller customer service first to create an account for your devices. You can login by username when you get a username and password.

Select "Log in by username" on the bottom of screen

Server: [www.mytkstar.net](http://www.mytkstar.net)

username: contact the seller customer service to create it.

Password: 123456

### Real-time tracking

Real-time tracking not only can track the position of the device, but also can track the position of a smart phone.

On map click "+" and "-" to zoom in and zoom out the map.

Click " " to view different locations between smart phone and device, and click " " to change the map vision between 2D/3D.

## **Explanation of other icons in APP**

Historical route: It could find the route map for nearly six months by choosing the beginning and ending time.

Geo-fence: It will generate an alarm on the App when the device is out of the Geo fence you set.

Issue: Issue commands to the device.

Device info: The information of the device.

Device message: The alert message generated by the device.

User Info: The information of the account.

Alarm setting: Turn on/off the different alarm types for the device.

## **Notices**

1. GPS tracking can be worked outdoors.
2. Please make sure the SIM card supports making calls, sending messages, and the GPRS network.
3. Please make sure the SIM card is with sufficient balance.
4. Please make sure the SIM card has opened the call shows and turned off the call transfer.
5. Please insert the SIM phone card correctly.
6. Do not assemble and disassemble devices at will.

## FAQ and processing methods

1. Fail to turn it on:

- Please check if the battery is charged.

2. No SIM signal:

- Please check if the SIM card is installed correctly.
- Please check if the SIM card supports the device's band network.
- Don't turn on the PIN code.
- No calls can be diverted.

3. No GPS signal:

- A more open view of the sky is recommended to make sure the device can receive the GPS signal normally.

4. No reply to SMS command:

- The command format is wrong or insufficient SIM card balance.
- Please make sure the SIM card has sufficient balance, and supports making calls, sending messages, GPRS network, and has opened the call shows and turned off the call transfer.

5. SMS position OK, cannot use the APP and web platform:

- Please check if APN is correctly set. And find out the correct APN content of the SIM card. (Pls refer to 6.1 setting.)

6. Platform position is difference from the actual position:

- No uploading position time or no GPS signal: call the device phone number and receive the position message. If it shows like Pic 2, it means no GPS signal. The position is the last GPS positioning location; If it shows like Pic 1, it means the device doesn't reach the uploading time.