B2316 Cat M1 & NB-IoT GPS Bracelet

User Manual V1.0

Preface

Congratulations on choosing the Mictrack B2316 CAT M1 & NB-IoT GPS Bracelet . This manual shows how to easily program and setup the tracker for best results. Make sure to read this manual carefully before using this product, so as to avoid delays or confusion with it's operation. Please note that specifications and instructions are subject to change without notice to facilitate product improvement. Updates and changes will be integrated into the latest release. The manufacturer assumes no responsibility for any errors or omissions in outdated documents.

Contents

1. Overview

B2316 is a GPS bracelet that uses the latest low-power Cat M1 & NB-IoT technology, fusion positioning technology and multiple sensor technologies, and built-in a eSIM card.

Including temperature monitoring, SOS alarm, body temperature,heart rate,step, indoor and outdoor positioning, Geo-fence, historical track query etc.

The data will be automatically reported to the server and mobile APP periodically.

The B2316 GPS bracelet is small, lightweight, and deeply waterproof, and is suitable for all-weather wear.It can be used for monitoring in schools, prisons, nursing homes, factories and hospitals.

2. Features

- **CAT M1 & NB-IoT & Network**
- Real-timing tracking
- GPS+WiFi+LBS Positioning
- History record check
- Geo-Fence alarm
- SOS alarm
- Body temperature report
- Heart rate report
- Blood pressure report
- Low battery alarm
- Power saving mode
- Long standby up to 72 hours
- P67 Waterproof
- PC & Mobile App tracking
- Open API/Protocol
- OTA

3. Applications

- COVID-19 Back to work
- Isolating people
- Entry from the airport
- Enterprise
- Crowd place
- Hospital
- School
- Kids

4. Specifications

Item	Specifications
Dimension	43(L)*23(W)*13(H)mm
Weight	30g
Charging mode	Magnetic USB charging Cable DC 5V
Backup battery	3.7 V 160mAh
Power consumption	30uA standby current
Working time	80 hours every 5mins upload interval
	130 hours every 30mins upload interval
	360 hours every 60mins upload interval
Working temperature	-20°C to 65°C
Cellular Bands	**Cat M1 (LTE-M, eMTC)** B1/B2/B3/B4/B5/B8/B12/B13/B14/B18/B19/B20/B25/B26 /B27/B28/B66/B85 **NB-IoT (Cat NB2)** B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/B20/B25/B26/B28 /B66/B71/B85
Bluetooth	Low Power Bluetooth BLE (OTA)
Positioning	GPS, WiFi, LBS
Tracking Sensitivity	-162 dBm
Sensor	Accelerometer, Temperature sensor, Heart rate sensor, blood pressure sensor
Screen	0.49 inch OLED
LED	GREEN
Button	SOS
SIM Card	6*5mm eSIM (MFF2)
Waterproof	IP67

5. B2316 interface

6. In the box

- 1* B2316 GPS Tracker
- 1* Magnetic USB charging cable
- 1* Quick Start Guide

7. First Use

7.1 SIM Card

- The devices built in eSIM Card, no need to install additional SIM card

7.2 Charge the device

- Please charge the device before using it for the first time.
- The green light is flashing means under charging, if the green light is on it means fully charged.

7.3 Power ON/OFF

- Press SOS button for 10 seconds to Power ON/OFF.

8. LED Indications

Status	Description
Green Blinking	● Charging
Solid Green	● full charged

9. Setup and Configuration

- If you use NB-IoT SIM card, ONLY can setup the device via Bluetooth App (because NB-IoT SIM do not support SMS)
- If you use Cat M1 SIM card, you can setup the unit via following SMS commands (9.1-9.10) or via Bluetooth App.

9.1 Change the password

SMS Command format: password,old passport,new password#

For example : password,0000,1234#

Reply: password=Success!

9.2 Set APN (Access Point Name)

SMS Command format 1: apn,password,apn,,#

For example : apn,0000,iot.nb,,#

SMS Command format 2: apn,password,apn,username,password#

For example: apn,0000,internet,internet,internet#

Reply: apn=Success!

9.3 Set the IP and port

SMS Command format : data,password,ip:port#

For example : data,0000,113.98.254.179:7700##

Reply: data=Success!

9.4 Working mode

9.4.1 Deep sleep interval mode

SMS Command format: Mode,password,1,T#

For examples: Mode,0000,1,30#

Reply: mode=success!

Note: Device will wake up and report one data to server every 30 minutes, after that it will go to sleep again until the next 30 minutes . T is [1-1440] minutes.

9.4.2 GPS sleep mode

SMS Command format: Mode,password,5,T#

For examples: Mode,0000,5,10#

Reply: mode=success!

Note: The device will wake up every 10 minutes and report one data to the server, after that it will go to sleep again until the next 10 minutes. T is [1-1440] minutes.

9.4.3 GPS always ON mode

SMS Command format: Mode,password,6,T#

For examples: Mode,0000,6,10#

Reply: mode=success!

Note: The device will report data every 10s .T is [10-86400] seconds.

9.4.4 Power Saving mode

SMS Command format: Mode,password,7,T#

For examples: Mode,0000,7,10#

Reply: mode=success!

Note: When the device detects continuous vibration for more than 10s, it will wake up and starts to connect to the network, After connected it will Immediately report a data (event 15) to the platform;

If the device is still in a vibrating state, MT825 will report to the server every 30 seconds/

If there is no vibration for more than 2 minutes, the device will automatically go to sleep and report a data((event 16) to server. T is [10-86400] seconds

9.5 Network mode

9.5.1 Setup to Cat M1 network only

SMS Command format : netlock,0000,2,3,0#

Reply: netlock=Success!

Note: In this mode device will only work under Cat M1 network.

9.5.2 Setup to NB-IoT network only

SMS Command format :netlock,0000,3,3,1#

Reply: netlock=Success!

Note: Device will only work under NB-IoT network.

9.5.3 Setup to AUTO Mode

SMS Command format : netlock,0000,0,0,2#

Reply: netlock=Success!

Note: Device will auto switch to the available network include Cat M1, NB-IoT

9.6 Setup network bands

9.6.1 Lock to CAT M1 Band

SMS Command format : bandlock,0000,28,0#

Reply: bandlock=Success!

Note: Device will lock to CAT M1 B28

9.6.2 Lock to NB-IoT Band

SMS Command format : bandlock,0000,0,20#

Reply: bandlock=Success!

Note: Device will lock to NB-IoT B20.

9.7 Positioning mode

9.7.1 GPS Only

SMS Command format : locatelock,0000,gps#

Reply: locatelock=Success!

Note: In this mode device wil only enable GPS (WIFI/LBS will disable)

9.7.2 WiFi Only

SMS Command format : locatelock,0000,wifi#

Reply: locatelock=Success!

Note: In this mode device will only enable WIFI(GPS will disable)

9.7.3 AUTO

SMS Command format : locatelock,0000,auto#

Reply: locatelock=Success!

Note: In this mode device will auto switch Outdoor GPS and indorr WiFi

9.8 Setup Protocol

9.8.1 Setup to TCP

SMS Command format: protocol, password,1,X#

For examples: protocol,0000,1,0#

Reply: protocol=success!

Note: X=1, means response ACK, X=0, means do not need response ACK.

9.8.2 Setup to UDP

SMS Command format: protocol,password, 0,Y#

For examples: protocol,0000,0,0#

Reply: protocol=success!

Note: Y=1, means response ACK, Y=0, means do not need response ACK.

9.9 Rconf

SMS Command format : rconf,0000,0#

After send this command, the device will reply as follow:

866425032478242,nbiot,,,113.98.254.179,7700,6,60,Cat M1, GPS,TCP, B2316B.0PT.DT12

Note: According the above message and we can get the info as follow:

ID: 866425032478242

APN: nbiot

IP/Port: 113.98.254.179:7700

Working mode: Mode,6,60#

Network mode: CAT M1

Positioning mode: GPS Only

Protocol: TCP

Version: B2316B.0PT.DT12

9.10 Reboot

SMS Command format : reboot,0000,0#

The device will restart after send this command.

Reply: reboot=Success!

9.11 Reset

SMS Command format : reset,0000,0#

The device will reset to default after send this command.

Reply: reset=Success!

9.12 OTA

Use the Bluetooth App to upgrade the firmware or config the devices

10. App & PC Tracking platform

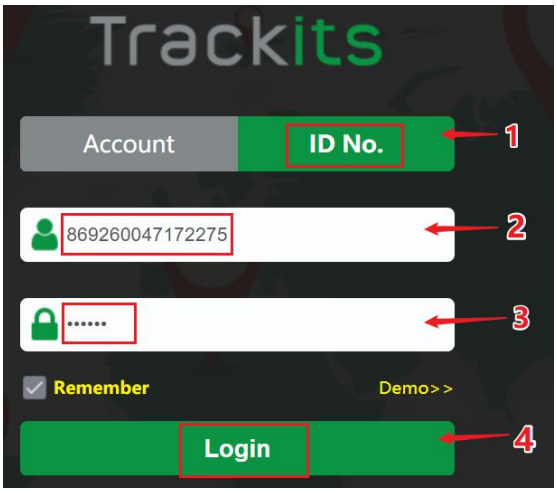
10.1 App install & Login

- Search "**Yi tracker**" in Google Play or iOS store(or scan the following QR code) to download the Mobile APP(not Yi tracker2);

- Choose the" Login by Device No., Input server www.trackits.com
- Input your device's ID number and password(default is 123456) to login.

10.2 PC login

- Web: www.trackits.com, Choose "**ID No**."
- Input your device's ID number and password(default is 123456) to login



Shenzhen Mictrack Electronics Co.,Ltd.

Add: B305-306, Kangsheng Electronic Industrial Park, Zhonghua Rd, Longhua District, Shenzhen, China 518131

Tel: +86-755-21014699

Web: www.mictrack.com

Email: info@mictrack.com