

Tracker-005 GPS Tracking System

PRODUCT SPECIFICATION

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Acronym and Technical Term

EPO	Extended Prediction Orbit, predicted ephemeris data specific for MTK chip solution.
MTK	Mediatek Inc.
TTFF	Time to First Fix
ezSpot	ezSpot is the registered name for Holux tracking service. The solution include program in mobile phone.

Introduction

Tracker-005 is a multi-functional tracker. Combining with GPRS and high performance GPS, the device can be used to track and report device's position and status. The operation modes include periodic tracking, geofence and position lock. SOS buttons can be used to send emergency call. All configurations can be set through SMS or USB virtual COMM port using configuration application program. With MTK EPO, it can get faster TTFF at distressed environment.

Hardware Specification

Dimension

57 x 43 x 21 mm

Weight

Body : 55 +/- 1 g

Battery : 10 +/- 1 g

Total : 65 +/- 2 g

CPU

MTK MT6223

Memory

MCP (64-Mbit NOR flash and 32-Mbit SRAM)

70,000 location logs

IO Interface

12-pin mini connector with USB virtual comm port.

LCD

96 x 65 dots FSTN

Active view area: 27.8 x 18.9 mm

Key

Three Keys

Power, menu and enter.

Accessories

Home Charger and Car Charger

Input 100 ~ 240 V, 0.2 A Max

DC output 5 V/1 A

MiniUSB to USB Cable

12-pin mini-connector cable (optional for data download)

RF Feature

Protocol

GPRS multi-slot class 12

GPRS mobile station class B

GSM Antenna

PIFA Two band antenna: GSM850, PCS1900 MHz

PIFA Two band antenna: GSM900, DCS1800 MHz

GSM/GPRS

MTK MT6223 + MT6139

SIM socket: 1.8, 3.0 V

GPS

Chip Set: MTK MT3318

32 channels

Cold start: 36 sec. warm start: 33 sec, hot start: 2 sec (according to MTK chip spec.)

Battery and Power Consumption

400 mAh, rechargeable, Li-polymer battery

Charge time: 2.5 hours

Standby time: 140 hours.

Periodic tracking with position fix at 15 minute interval: 60 hours.

Software Specification

GPS

MTK GPS solution and TTFF reduction with EPO

SMS

Configuration provision, position request and alarm message transfer

GPRS

Support SMS, HTTP connection to transfer position and device status.

Logs

Location log..The maximal number for location log is 70,000 records.

ezSpot

ezSpot is a software running in mobile phone. It can be used to send setting, position request SMS and unlock SOS message.

Applications

Emergency Report (SOS)

- Pressing two keys(menu key + enter key) simultaneously for more than 3 seconds will activate SOS mode. Tracker will try to get a fix immediately and send SOS signal.
- When SOS is activated, if it is in main screen (Ref. Section 9.3.2), screen will display SOS icon.
- In SOS mode, it will send SMS 3 times successfully and then stop sending SMS. When it is executing positioning and reporting or is in main screen,SOS flash icon will be displayed on screen.
- Tracker will report position to ezSpot with phone number 1.
- In SOS mode, SOS can be unlocked by pressing two keys(menu key + enter key) simultaneously for more than 3 seconds again. SOS also can be unlocked by mobile phone "SOS unlock" message.
- If position fix fails, device will send the latest position.
- SOS mode has the highest priority. Power off function is non-functional during SOS mode.

Current Position Request and Report

Current position and status can be request through SMS command using ezSpot. The tracker will turn on GPS instantly to get a position fix and transfer back position information to ezSpot in mobile phone. If it can't get a fix, it will transfer the latest position and fix status.

Settings

Basic Setting

EPO server IP: The specific IP or domain name of the EPO server.

EPO server port: The specific port of the EPO server.

EPO data threshold: The lifetime of EPO data.

Report phone number: The specific phone number for position report and SOS SMS. 4 phone numbers can be set. If caller phone number is not in the list, device will not respond to the position request.

Custom Message Setting

User can set 10 set custom phone numbers and 10 set custom message settings.

These settings will be stored in Tracker-005. These settings are used for user to select custom message and custom phone number to send out.

Operation Environment

Operation temperature: -10 °C ~ 50 °C

Storage temperature: -20 °C ~ 60 °C

Waterproof: IPX6

Mechanical Outlook

