

MT700L Series

4G LTE Cat 1bis Asset GPS Tracker

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§01 Quick Reference & Safety Warnings

Thanks for purchasing the Mictrack MT700L Asset GPS Tracker. This manual explains how to program and set up the tracker for the best results. Please read this manual carefully before using this product, to avoid delays or confusion with its 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 The manufacturer assumes no responsibility for any errors or omissions in outdated documents.

Model Variants

"MT700L" = rechargeable models; "MT700L-N" = non-rechargeable (AA) models, regardless of region. Check the label on the back of your device for the exact model code.

Model	Region	Battery
MT700L - EU	Europe, Asia-Pacific, Africa	Rechargeable 3.7V 7800mAh Li-polymer (built in)
MT700L - LA	Latin America	Rechargeable 3.7V 7800mAh Li-polymer (built in)
MT700L - N - EU	Europe, Asia-Pacific, Africa	3 × AA 1.5V Li-FeS2 (user-installed, not included)
MT700L - N - LA	Latin America	3 × AA 1.5V Li-FeS2 (user-installed, not included)

How to Choose: Rechargeable vs. Non-Rechargeable

As a quick rule: if your reporting interval is under 4 hours, choose the rechargeable version (MT700L); if it's 8–24 hours, the non-rechargeable version (MT700L-N) is more cost-effective. MT700L includes a built-in 7800mAh backup battery (up to 3 years at one report/day); MT700L-N runs on 3 × AA cells, purchased separately (up to 7 years at one report/day).

Non-Rechargeable Battery Recommendation (For MT700L-N Series)

To ensure device safety and achieve the advertised 7-year battery life, follow these guidelines:

- Battery Type: Lithium Iron Disulfide (Li-FeS2) 3 × AA 1.5V cell batteries.
- Recommended Brand: Energizer® Ultimate Lithium™ L91 AA 1.5V ([specification sheet](#)).
- Do NOT use standard alkaline or carbon-zinc batteries: such batteries degrade rapidly below 0°C and risk acid leakage.

IP68 Waterproof Compliance & Disclaimer

- **Rechargeable Version (MT700L-EU/LA):** The main casing is fully factory-sealed. Only open the side port cover using the provided screwdriver to insert the Nano SIM card. Ensure the rubber seal is aligned and clean before locking.
- **AA Version (MT700L-N-EU/LA):** When installing or replacing batteries, inspect the black rubber sealing ring around the casing. Ensure it sits flat and clean in the groove. Tighten all screws firmly in a cross pattern.

NOTE — INTERNAL BATTERY-TYPE SELECTOR SWITCH

Each device has an internal battery-type selector switch, already set correctly at the factory (MT700L-N: LEFT / Non-Rechargeable; MT700L: RIGHT / Rechargeable), with a warning sticker next to it inside the casing. It only needs attention when opening the casing to replace AA batteries — avoid touching or reversing this switch. Setting it incorrectly and then connecting a charger WILL CAUSE BATTERY LEAKAGE, FIRE, OR EXPLOSION.

- **Disclaimer:** Water damage resulting from improper user assembly is not covered under warranty. We strongly recommend ordering our factory pre-installed battery package for large-scale B2B deployments.

§02 Product Overview

The MT700L is an IP68 waterproof asset GPS tracker that uses 4G LTE Cat 1bis technology, providing up to 7 years standby time powered by internal batteries. Its built-in powerful magnets allow easy installation without wiring. Track the unit in real-time via mobile phone or PC anywhere. Widely used in fleet management, trailers, containers, logistics, car rental, auto finance, and cargo transportation.

2.1 Features

- 4G LTE Cat 1bis Connectivity
- Up to 7 Years Standby Battery Life
- IP68 Dust & Water Resistance
- Triple Positioning: GPS + WiFi + LBS
- Dynamic Power Path Management
- Ultra-Low Power Consumption
- Easy Installation with Built-in Powerful Magnets
- Bracket Kits (optional)
- Rugged, Tamper-Proof Construction
- Low Power & Removal Alerts
- Smart Motion Detection
- Scheduled Timing Reports
- Multiple Power Saving Modes (configurable modes)
- PC & Mobile App Tracking
- Programmable via Web, USB-C, or SMS
- Open Protocol & Easy Integration with third-party platforms

2.2 Applications

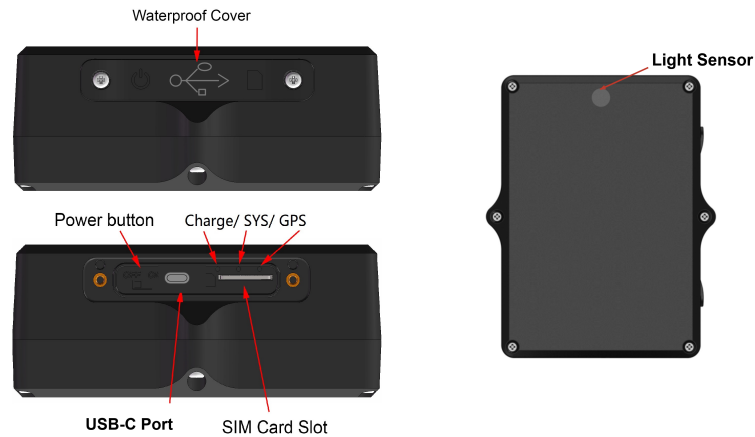
- Trailer Tracking
- Container & Cargo Logistics Tracking
- Fleet Management
- Vehicle & Assets Rental
- Auto Finance & Asset Recovery

§03 Specifications

Item	Specifications
Dimension	88mm × 62mm × 34mm (3.46" × 2.44" × 1.34")
Weight	290g (10oz)
Charging Mode	USB-C charging DC; Quick Charge 2A@5V (Only for MT700L-EU/MT700L-LA)
Power Consumption	<1.5µA standby current (in lowest power configuration)
Backup Battery (Two Versions)	Rechargeable 3.7V 7800mAh Li-polymer battery (Only for MT700L-EU/MT700L-LA) Non-rechargeable LiFeS ₂ , batteries excluded (Only for MT700L-N-EU/MT700L-N-LA)
Cellular Bands (EU Version)	MT700L-EU / MT700L-N-EU: 4G LTE Cat 1bis: B1/B3/B5/B7/B8/B20/B28
Cellular Bands (LA Version)	MT700L-LA / MT700L-N-LA: 4G LTE Cat 1bis: B2/B3/B4/B5/B7/B8/B28/B66
Working Temperature	-20°C to 60°C (-4°F to 140°F)
Mounting	Magnet, Bracket Kits (optional)
Positioning	GPS, LBS, WiFi
GPS	Built-in GNSS receiver
GPS & Cellular Antenna	Internal
Sensor	3-Axis Accelerometer, Light Sensor
LED Indications	Charge (Red), SYS (Blue), GPS (Green)
SIM Card Interface	Internal Nano SIM (4FF SIM)
Protocol	TCP, UDP, SMS
Waterproof Rating	IP68

§04 Hardware Interface

Open the side waterproof cover with the provided screwdriver to access the hardware interface. The internal components of the MT700L series are shown below:



- **Waterproof Cover:** Compliant with IP68. Protects the internal port, switch, and slot. Ensure it is aligned and screws are locked tight after configuration.
- **Power Button:** Toggle switch to power the tracker ON or OFF.
- **USB-C Port:** Connect a USB-C cable for charging or PC web config tool connections (config.mictrack.com).
- **SIM Card Slot:** Nano SIM (4FF) push-push slot. Insert the card in the direction of the SIM icon.
- **Charge / SYS / GPS LEDs:** Red (Charge), Blue (SYS/State), Green (GPS Status).
- **Light Sensor:** Located on the top of the rear casing. Detects ambient light to trigger the Removal Alert when the device is exposed after being taken off an asset. A black sticker covers the sensor before shipment — remove it before installation so the Removal Alert can trigger correctly.

§05 In the Box & SIM Installation

5.1 Standard Accessories

- 1 × MT700L Asset GPS Tracker
- 1 × USB-C Charging Cable (for MT700L-EU / MT700L-LA only)

Note: MT700L-N (AA) models do not include batteries — you can source 3 × L91 AA cells locally (remove the rear cover screws to install), or order them pre-installed from Mictrack so the device arrives ready to power on (see §01).

NOTE – BATTERY POLARITY

Install each L91 cell matching the +/- marks inside the battery compartment. Reversed polarity may damage the device.

5.2 Optional Accessories

- 1 × USB Config Cable
- 1 × Mounting Bracket

5.3 SIM Card Installation

1. Prepare a Nano SIM Card (4G LTE) with a data plan of around 15MB per month.
2. Use a screwdriver to open the USB-C / SIM port waterproof cover on the side of the device.
3. Insert the Nano SIM card in the direction indicated by the SIM icon.
4. Turn the Power switch from OFF to ON.
5. Close the waterproof cover.

§06 LED Indications

Red Indicator — Charge (Rechargeable Version Only: MT700L-EU / MT700L-LA)

Status	Description
OFF	Not charging or fully charged
Solid Red	Currently charging

Blue Indicator — System State

Status	Description
OFF	Device is powered OFF or in sleep mode
Solid Blue	Device is in active running mode

Green Indicator — GPS Fix Status

Status	Description
OFF	Device is powered OFF, GPS is unavailable, or device is in sleep mode
Solid Green	GPS position is fixed and active

§07 Configuration

The MT700L series supports two configuration options. Choose the option that best suits your deployment scale:

- **Option A — USB Web Configuration** (recommended for bulk setup): connect via USB Config Cable and visit config.mictrack.com in Chrome or Edge. Configure APN, server IP, port, and working modes without SMS.
- **Option B — SMS Command Configuration** (recommended for single-device setup): send the commands below by SMS to the tracker's SIM number.

SMS Formatting: commands are case-sensitive, no spaces, keep every '#' exactly as shown.

7.1 Change Password

4-digit SMS password (default 0000) — different from the 6-digit platform login password (default 123456, see §08).

Format: 777+new_password+old_password
Example: 77712340000
Reply: SET USER PASSWORD OK.

7.2 Set APN

Contact your mobile network operator for the correct APN: publicly listed APNs are often inaccurate.

Format: #803#password#APN## (or with credentials: #803#password#APN#APN_username#APN_password##)
Example: #803#0000#internet##
Reply: SET GPRS APN OK.

7.3 Set IP and Port

Format: #804#password#IP_or_domain#port##
Example: #804#0000#e.trackits.com#7700##
Reply: SET SERVER IP AND PORT OK.

7.4 Working Mode Configurations

Use the corresponding SMS command to switch modes according to your tracking and battery preservation objectives:

Mode	Behavior	Command Format	Battery Life*
Mode 1 Real-Time	Always reporting at a fixed interval. Best for testing and active transit.	MODE,1,password,T (10-600s) Ex: MODE,1,0000,10	8-10 days*
Mode 0 Mix Mode	Reports fast when moving, slow when still. Good for high-value goods needing quick motion alerts.	MODE,0,password,T1,T2 T1 = moving interval (sec, 10-600) T2 = still interval (hr, 1-24) Ex: MODE,0,0000,10,1	Up to 113 days*
Mode 7 Smart Low Power	Reports every few minutes when moving, much less when still — best balance of tracking and battery life.	MODE,7,password,T1,T2 T1 = moving interval (min, 10-1440) T2 = still interval (hr, 1-24) Ex: MODE,7,0000,10,1	Up to 692 days*
Mode 3 Ultra Low Power	Reports every few hours. Best for assets that are monitored infrequently.	MODE,3,password,T (1-24h) Ex: MODE,3,0000,1	Up to 7 years*

Reply for each: SET TRACKER MODE:<n> OK

*Estimates assume default settings and good network coverage. Mode 1: always reporting at a 1-minute interval. Mode 0 & Mode 7: based on 2 hours of movement per day. Mode 3: one report per day. Actual battery life depends on reporting interval, signal conditions, and temperature.

Need a different mode? Refer to the full command list: [Mictrack_MT700 Commands_List.pdf](#). Mode switching restarts the device automatically; replacing the battery does not reset your current mode.

§08 Alerts & Tracking Platform

8.1 Alerts & Events

Alert	Event Code	Description
Low Battery Alert	BLP	Sent when the device's backup battery runs low.
Removal Alert	DEF	Sent when the device is removed from the asset (detected via the light sensor).
Vibrate Alert	TOWED	Sent when the device wakes from stillness due to motion. MODE 0, 7, and 4 (see full command list) only.

8.2 Tracking Platform

Optional — only applies if you use Mictrack's own tracking platform; skip this if using your own platform.

1. Subscribe to a tracking plan at shop.mictrack.com.
2. Search "Yi tracker" in Google Play or Apple App Store to download the mobile app.
3. Open the app, select "Login by Device No.", enter the server address (www.trackits.com), then enter your device ID and password (6-digit, default 123456). You can change the password yourself later.

8.3 Platform Integration & Open Protocol

Mictrack uses an open communication protocol — integrate the MT700L into your own or a third-party platform instead of Mictrack's own service.

- Protocol reference: [Mictrack_Communication_Protocol_For_MT700_V1.0.pdf](#)
- Supported third-party platforms: help.mictrack.com/articles/supported-third-party-platforms

§09 Troubleshooting

Issue	Possible Cause	Solution
No response to SMS commands	SIM not inserted correctly or not activated.	Re-insert the SIM facing the icon, ensure active data/SMS plan, try again.
No response to SMS commands	SMS text format incorrect.	Use USB Config Cable for initial setup, or double-check character format.
Platform shows offline	APN incorrect, or region/band mismatch.	Verify APN via SMS; confirm correct region variant (EU / LA).
Location off West Africa (0,0)	No GPS satellite lock yet (default null coordinates).	Normal indoors at first power-on. Take outdoors 5–10 min, or enable WiFi Positioning.
No LED light visible	Battery fully depleted.	Recharge 30+ min via USB-C, or replace the 3×AA batteries (MT700L-N).

§10 Environmental Protection & Compliance

10.1 Battery Disposal (For EU & UK Customers)

In compliance with the WEEE Directive and EU/UK Battery Regulations, empty batteries and electrical waste must not be disposed of with general household refuse. Please deposit depleted L91 Lithium or AA batteries at authorized municipal recycling and collection centers.

10.2 Contact Us & Support

Shenzhen Mictrack Electronics Co., Ltd.

Address: Room 807, 8/F, Building C, Gaoke Innovation Center, Kelian Rd, Guangming District, Shenzhen 518132, China

Tel: +86-755-28198746

Web: www.mictrack.com

Email: info@mictrack.com