

EM100 User Guide

V1.0

Revision Date: 4/21/2025



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1 Copyright and Disclaimer

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While this manual provides accurate information, ongoing research and development may result in periodic updates. The version you are reading reflects the current state of our products, and we have strived to present a clear and comprehensive description to facilitate ease of use. However, due to rapid technological advancements, some technical expressions may evolve. We reserve the right to make modifications and improvements without prior notice.

2 Product Overview

The EM100 is a compact, one-time-use disposable GPS tracker designed for asset monitoring with LTE 4G connectivity.

Equipped with a high-capacity 4500mAh battery, it can operate for up to 10 years, with data uploads occurring every 5 days. The device supports multiple working modes and features an anti-removal alarm for enhanced security.

3 Product Functions

Items	Functions
Communication	Location Data transmitting-GPRS(TCP/UDP)
	Commands- GPRS/Serial port
Position Tracking	Real time location monitoring mode
	Track by time interval (range from 5mins to 30 days interval)
	Track by time point (1 to 24 time point one day)
	up to 3-10 years working
Alarm	Low battery alarm (GPRS)
	Speeding alarm (GPRS)
	Anti-dismantle alarm(GPRS)
Buffer	Data in Buffer when in GPRS blind area
Initialization	Initialize tracker's Parameters via GPRS/Serial port

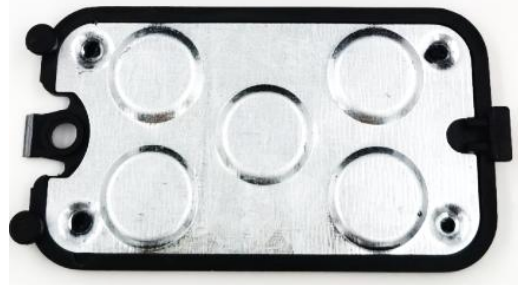
4 Specifications

Items	Specifications			
Tracker Dimension	2.71 inches X 1.61 inches X 1.14 inches (69*41*29 mm)			
Tracker Color	Black (Other colors can be customized)			
Weight	Tracker weight	0.22 lbs	Total package	0.33 lbs
Working voltage	DC 3V			
Working current	40mA-100mA/3V			
Sleeping mode	<15uA			
Working Days	Once a day location update, battery will last for 3 years. One location update every 5 days, battery will last for 10 years.			
Built-in battery	Li-MnO2 disposable battery 4500mAh 3pc 123A			
Operating temperature	-13°F to 176°F.			
Operating humidity	0% -- 100%			
LED indicator	Green led and Red led light indicates GPS and GSM status respectively			
Power Switch	Built-in battery switch on Mainboard			
Light Sensor	Built-in light sensor for tamper alert			
Magnet	With 5pcs strong magnet (Optional)			
4G LTE Module	SIMCOM 7670SA 4G CAT1 Cellular Module 4G LTE FDD: B1/B2/B3/B4/B5/B7/B8/B28/B66 2G GSM/GPRS/EDGE: 850/900/1800/1900MHz			
GPS Module	Positioning accuracy	<= 2m CEP		
	Cold start time	<=30s(AGNSS Close) <=5.5s(AGNSS Open)		
	Warm start time	<= 2s (in average)		
	GPS Sensitivity	-159Db		
	GPS L1 C/A	1575.42 MHz		
	GLONASS L1	1602.5625 MHz		
	BeiDou B1	1561.098 MHz		
	QZSS L1	1575.42 MHz		

5 Standard Package and Optional Accessories

Name	Picture	Standard/Optional Parts
EM100 Tracker		Standard
Magnet		Optional
Mirco-USB Configuration cable		Optional

6 Appearance and Structure

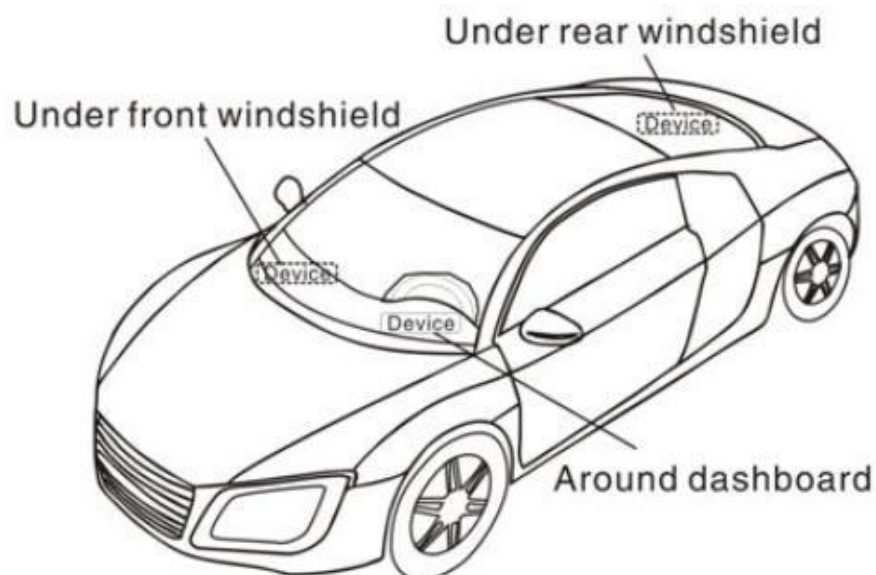


7. LED light Indicator

LED Light		ON/OFF Indication		Description
		Light On	Light Off	
GSM	Green		Off	Power Off
		<i>Always on</i>		<i>The firmware working, but the SIM card cannot be recognized</i>
		<i>Blinking every 0.1 sec</i>		<i>Searching for Cellular Network or connecting to the platform</i>
		Blinking every 1 sec		Online
GPS	Red		<i>Off</i>	<i>GPS closed or GPS no data</i>
		<i>Blinking every 0.1sec</i>		<i>Searching GPS signal</i>
		Blinking every 1 sec		GPS valid, Position get fixed

9 Installation

Install the device in car//Trailer.



10 Warranty

- The warranty period is **12 months** from the delivery date. However, it does not cover defects, failures, or damages caused by **improper use, unauthorized disassembly, or modifications**.
- Our obligations are limited to **repairing the defect, replacing the faulty part, or, at our discretion, replacing the product entirely**.
- Repairs or replacements under this warranty do not entitle the user to **an extension or renewal of the warranty period**.
- The warranty applies **only to defects in materials, design, and workmanship** and does not cover other issues.

Contact Us

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