



LL303

LTE Solar Powered GNSS Tracker

The LL303 is a 4G solar-powered tracker designed for the management of construction vehicles and vessels. Featuring the solar panel, magnetic charger, and IP67 waterproof rating, this device is ideal for a variety of deployments that require long standby time and continued optimal performance. LTE communication with GSM (2G) fallback ensures a solid connection in almost all cases. In addition to these features, multiple working modes, various peripheral accessories and the suite of event-triggered alerts will make the LL303 a valuable part of your fleet management strategy.



LTE & GSM Network

Communication via 4G LTE networks with 2G GSM fallback.



GPS & BDS & LBS Positioning

A synergy of multiple positioning systems ensures that locations are accurately displayed on the cloud platform.



Solar & Magnetic Charging

Easy charging via the solar panel and magnetic charger.



IP67 Dust & Water Resistance

Rugged design ensures continued optimal performance, even in the toughest conditions.



Multiple Alerts

Instant alerts for atypical events such as device removal, abnormal vibration, abnormal temperature & humidity, etc.



Multiple Working Modes

Configurable working modes according to your actual demands.



Bluetooth Accessory Compatibility (Optional)

Various bluetooth peripheral accessories allow for monitoring of fuel consumption, door status, etc.



RFID Reader (Optional)

Access the information of devices via the active RFID.

Construction Machinery



Asset & Logistics



Vessel Tracking



GNSS

Positioning system	GPS+BDS+LBS
Positioning accuracy	<2.5m CEP
Tracking sensitivity	-165dBm
Acquisition sensitivity	-148dBm
TFF (open sky)	Avg. hot start ≤ 1sec Avg. cold start ≤ 32sec

Cellular

Communication network	LTE Cat 1/GSM	LTE Cat M1/Cat NB2
Frequency	LL303-L: LTE-FDD: B1/B2/B3/B4/B5/B7/B8/B20/B28 LTE-TDD: B40 GSM: B2/B3/B5/B8 LL303-E: LTE-FDD: B1/B3/B5//B7/B8/B20/B28 LTE-TDD: B38/B40/B41 GSM: B2/B3/B5/B8	LL303-A Cat M1: B2/B4/B5/B12/B13/B25/B26/B66 Cat NB2: B2/B4/B5/B12/B13/B25/B26/B66 GSM: B2/B3/B5/B8

Power

Battery	10,000mAh/3.7V industrial-grade Li-Polymer battery
Solar power	5V/400mA (Standard Operating Voltage/Current @STC) STC: Direct illumination with 38,000lux halogen lamp on the test bench.
Magnetic charger	5V/2A
Working modes	Mode 1: Timing positioning mode Mode 2: Intelligent positioning mode Mode 3: Battery saving mode
Standby time	Up to 2 years in battery saving mode

Interface

LED indication	Cellular (Green), Power (Red)
SIM	Nano-SIM
Tamper proof	Hall effect sensor

Physical specification

Dimensions	203x122x33mm
Weight	548g

Operating environment

Operating temperature	-20 C to +70 C
Operating humidity	5%~95%, non-condensing
IP rating	IP67

Feature

Sensors	Accelerometer, Hall effect sensor
Scenarios	Low battery alert, Tamper alert, Vibrating Alert
Bluetooth	BLE 5.0
RFID	2.4GHz