

Solar Powered GPS Smart Lock

SolarGuardX 100 is an advanced tracker & lock for high value asset

SolarGuardX 100



LTE Cat-M1 (eMTC)/Cat-NB2 (NB-IoT) and GSM assets tracking lock for high value asset



🔋 | 1050g (37oz)

📏 | 207.5mm*110.2mm*48.1 mm
(8.17" *4.39" *1.9") (without rope)

🌡️ | -25°C ~ +70°C
(-13°F ~ 158°F)

🔋 | Rechargeable Li-Polymer 14400mAh/
3.6V

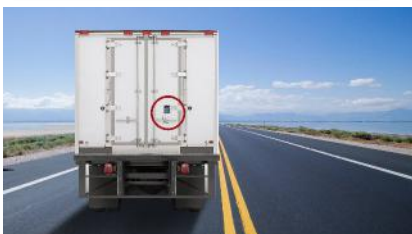
Certificates (planned):



*Please reach out to us if you need any certificates in particular

- ☀️ Solar Panel
- 🔓 Unlock by RFID, BLE, OTA, SMS commands
- 🧲 Built-in Strong Magnet
- 🛡️ Waterproof IP67
- ☁️ Firmware Over the Air
- 🚨 Motion Detection
- 🕒 Locking/unlocking/rope-cutting Alarm
- 📅 Super Long Battery Life
- 🔒 Data Security (MD5/AES)
- 📡 MQTT Support
- 📶 BLE 5.1
- 📡 RFID
- 📍 Built-in Geofence

Fleet management



Container monitoring



Guards multiple doors



SolarGuardX 100 Spec

Operating Band	LTE FDD Cat M1: B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/B20/B25/B26/B27/B28/B66/B85 LTE FDD Cat NB2: B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/B20/B25/B28/B66/B71/B85 GSM/EDGE:850/900/1800/1900 MHz
Data Transmission	eMTC: Max. 588 (DL), Max. 1119 (UL) NB1: Max. 32Kbps (DL), Max. 70Kbps (UL) NB2: Max. 127 (DL), Max. 158.5 (UL) EDGE: Max. 296Kbps (DL), Max. 236.8Kbps (UL) GPRS: Max. 107Kbps (DL), Max. 85.6Kbps (UL)
GNSS Specifications	
GNSS Chipset	MediaTek High Gain GNSS receiver
Parallel GNSS	GPS+Glonass or GPS+Beidou
Receiver Type	33 tracking / 99 acquisitions- channel GNSS receiver
Sensitivity	Acquisition: -149 dBm Tracking: -167 dBm Reacquisition: -161 dBm
Horizontal Position Accuracy	Autonomous: < 2.5 m CEP
TTF @ -130 dBm with (without) EASY™	Cold Start: < 15s (32s) Warm Start: < 8s (28s) Hot Start: < 1s (1s)
Interfaces	
Charging Port	1
Network, GNSS, BLE, RFID, Antenna	Internal only
Indicator LED	Network, GNSS, RFID and Battery
FOTA	Yes
Physical Power Switch	1
Temperature Sensor	1 temperature sensor
RFID	Yes
SIM Card	Nano SIM
USB Type-C Connector	Data Communication and charging
BLE 5.1	Yes
General Specifications	
Waterproof	IP67
Dimensions	207.5mm*110.2mm*48.1 mm (8.17" *4.39" *1.9")
Weight	1050g (37oz)
Battery	Rechargeable Li-Polymer 14400mAh/ 3.6V
Charging	Customized USB cable (Recommend using 5V 1A adaptor, 30 hours charging)
Operating Temperature	-25°C ~ +70°C (-13°F ~ 158°F)
Mounting	Built-in Magnet
Rope	Rope 400mm (standard)
Air Interface Protocol	
Transmit Protocol	TCP, UDP, MQTT, SMS
Data Security & Encryption Option	MD5/ AES256
BLE Accessory Support	Yes
Scheduled Timing/angle/distance Report	Report position and status at preset intervals
Geo-fence	Support up to 64 internal geo-fence regions
Industry Certifications (Planned)	
CE, RCM, IC, FCC, PTCRB, AT&T, US Cellular, T-Mobile, Verizon	