

SOLAR POWERED GPS SMART LOCK

SolarGuardX 100 ^{4G} GPS Smart Lock

LTE Cat-M1 (eMTC) / Cat-NB2 (NB-IoT) and GSM tracking lock for high-value assets, with North American carrier certifications (planned).



Key features

-  Solar panel
-  Built-in strong magnet
-  Firmware over the air (FOTA)
-  Locking / unlocking / rope-cutting alarm
-  Data security (MD5 / AES)
-  BLE 5.1
-  Built-in geofence
-  Unlock by RFID, BLE, OTA, SMS commands
-  Waterproof IP67
-  Motion detection
-  Super long battery life
-  MQTT support
-  RFID



WEIGHT
1050 g (37 oz)



DIMENSIONS
207.5 × 110.2 × 48.1 mm (without rope)



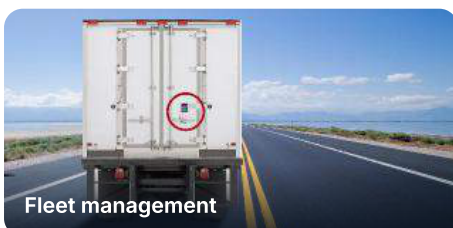
OPERATING TEMP.
-25 °C ~ +80 °C



BATTERY
Li-Polymer 14,400 mAh / 3.6 V

Applications

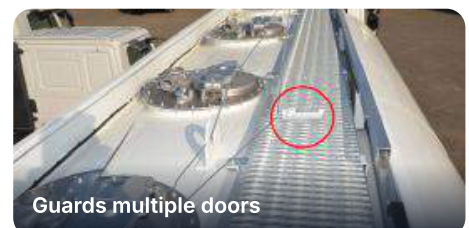
CERTIFICATES (PLANNED)



Fleet management



Container monitoring



Guards multiple doors

Technical specifications

Network	
Operating bands	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 kbps (DL), max. 1119 kbps (UL) NB1: max. 32 kbps (DL), max. 70 kbps (UL) NB2: max. 127 kbps (DL), max. 158.5 kbps (UL) EDGE: max. 296 kbps (DL), max. 236.8 kbps (UL) GPRS: max. 107 kbps (DL), max. 85.6 kbps (UL)
GNSS	
GNSS chipset	MediaTek High Gain GNSS receiver
Parallel GNSS	GPS + GLONASS or GPS + BeiDou
Receiver type	33 tracking / 99 acquisition-channel GNSS receiver
Sensitivity	Acquisition: -149 dBm Tracking: -167 dBm Reacquisition: -161 dBm
Horizontal position accuracy	Autonomous: < 2.5 m CEP
TTFF @ -130 dBm with (without) EASY™	Cold start: < 15 s (32 s) Warm start: < 8 s (28 s) Hot start: < 1 s (1 s)
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-C connector	Data communication and charging
BLE 5.1	Yes
General	
Waterproof	IP67
Dimensions	207.5 × 110.2 × 48.1 mm (8.17" × 4.39" × 1.9")
Weight	1050 g (37 oz)
Battery	Rechargeable Li-Polymer 14,400 mAh / 3.6 V
Charging	Customized USB cable (5 V 1 A adaptor recommended, approx. 30 h charging)
Operating temperature	-25 °C ~ +80 °C (-13 °F ~ 176 °F)

Technical specifications (cont.)

General (cont.)	
Mounting	Built-in magnet
Rope	400 mm (standard)
Air interface protocol	
Transmit protocol	TCP, UDP, MQTT, SMS
Data security & encryption	MD5 / AES256
BLE accessory support	Yes
Scheduled timing / angle / distance report	Reports position and status at preset intervals
Geo-fence	Up to 64 internal geo-fence regions
Certifications (planned)	CE, RCM, IC, FCC, PTCRB, AT&T, US Cellular, T-Mobile, Verizon