

SOLAR POWERED GPS SMART LOCK

SolarGuardX 110 4G

4G Cat 1 / 2G tracking lock for high-value assets – containers, trailers and tankers. ATEX-marked version.



Key features

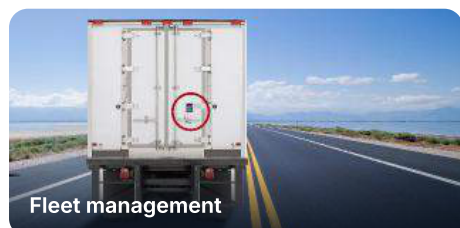
-  Solar panel
-  Built-in strong magnet
-  Firmware over the air (FOTA)
-  Alarms for locking, unlocking, rope cutting and SIM cover removal
-  Indicator lights and buzzer
-  BLE 5.1 Long Range
-  Built-in geofence
-  Unlock by RFID, BLE, OTA, SMS commands
-  Waterproof IP67
-  Motion detection
-  Super long battery life
-  MQTT support
-  RFID

Standby time without solar charging

10 min reporting		402 days
5 min reporting		315 days
1 min reporting		144 days

Based on 2 hours of active tracking per day, without solar charging.

Applications



CERTIFICATES (PLANNED)



Technical specifications

Network	
Operating bands	LTE FDD Cat 1: B1/B2/B3/B4/B5/B7/B8/B12/B13/B17/B18/B19/B20/B25/B26/B28/B66 LTE TDD Cat 1: B34/B38/B39/B40/B41 GSM: 850/900/1800/1900 MHz
Data transmission	LTE-FDD: max. 10 Mbps (DL), max. 5 Mbps (UL) LTE-TDD: max. 8.96 Mbps (DL), max. 3.1 Mbps (UL) GPRS: max. 85.6 kbps (DL), max. 85.6 kbps (UL)
GNSS	
GNSS chipset	All-in-one GNSS receiver
GNSS system	GPS + GLONASS + BeiDou + Galileo + QZSS
Receiver type	47 tracking / 47 acquisition-channel GNSS receiver
Sensitivity	Acquisition: -147 dBm Reacquisition: -159 dBm
Horizontal position accuracy	Autonomous: < 1.5 m CEP
TTFF @ -130 dBm with (without) EASY™	Cold start: < 15 s (30 s) Warm start: < 2 s (25 s) Hot start: < 2 s (2 s)
Interfaces	
Charging port	2-pin, 5 V DC
E-lock configuration port	USB-C connector
Network, GNSS antenna	Internal only
Open SIM card cover alert	Supported
Indicator LED	Battery, network, GNSS, RFID
FOTA	Yes
Power-on button	1
Temperature sensor	1 temperature sensor
BLE 5.1	Yes
General	
Waterproof	IP67
Dimensions	207.5 × 110.2 × 48.1 mm (8.17" × 4.39" × 1.9")
Weight	1060 g (37.4 oz)
Battery	Rechargeable Li-Polymer 14,400 mAh / 3.6 V
Standby time (without solar charging, 2 h active tracking per day)	10 min reporting: 402 days 5 min reporting: 315 days 1 min reporting: 144 days
Charging	2-pin (5 V 3 A adaptor recommended, approx. 15 h charging)
Operating temperature	-25 °C ~ +80 °C (-13 °F ~ 176 °F)

Technical specifications (cont.)

General (cont.)	
Mounting	Built-in magnet
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
Alarms	Rope cut, moving, stop, lock, unlock
Certifications (planned)	CE, FCC, RCM, Anatel, CITC, TDRA, NBTC, ATEX