



## DATASHEET:

## SOLAR POWERED ASSET TRACKER

# SOLAR SENSE MINI

Solar Sense Mini is a compact LTE Cat 1 Asset Tracker that supports long-term, remote deployments without the need to replace the battery.

Solar Sense Mini utilizes a high-efficiency solar panel to charge and maximize the operating life of the internal Lithium Ion battery. Customers who require frequent data for location, health, and monitoring of their remote assets can be assured that the Solar Sense Mini will provide more frequent data for longer periods compared with other asset tracking devices.

The internal 2500 Ah battery is best-in-class. It is rugged and designed to withstand various environmental factors, the Solar Sense Mini is tested to meet IP67 rating. With a fully sealed, protective case the device can be deployed in hard environments.

### USE CASES

- Trailer and Chassis
- Rail Cars
- Intermodal
- Containers
- Heavy Machinery
- Transportation Equipment
- Mobile Signage
- Generators
- Mobile Lighting
- Agriculture
- Many More

### KEY FEATURES

- Compact size
- Easy Installation
- Solar Powered
- Waterproof
- BLE 5.3 Full Wireless Sensor Solution
- Works With Door, Temperature and Humidity Sensor
- 2500 mAH Rechargeable Battery
- Integrated GPS receiver and antenna
- Integrated LTE band antenna
- Low Battery Alarm



Optional Door and Temperature  
Sensor For Solar Sense Mini

# SOLAR SENSE MINI SPECIFICATIONS:

## GENERAL SPECIFICATIONS

Dimensions	88mm* 60.4mm*30.7 mm (3.46" *2.38" *1.21")
Weight	370g (5.3oz)
Battery	Rechargeable Li 2500 mAh/ 3.6V
IP Rating Waterproof	IP67
Standby Time	Unlimited Standby time with proper setting.
Charging & Data Communication	Type C Cable (A to C and C to C) (Recommend using 5V 1A adaptor, 5 hours charging)
Solar Panel	For charging the tracker battery
Operating Temperature	22 °F to 176 °F (-30 °C to 80 °C)
Mounting	Magnet/Screw/VHB Tape

## INTERFACES

Charging and Data Transmission	Type -C Connector
Network, GNSS Antenna	Internal only
Indicator LED	Network, GNSS and Battery level
FOTA	Yes
Touch Button	For Power On and Off
Hall Switch	For Remove Alert
Sim Card	Nano Sim Card
Temperature Sensor	Built-In Temperature Sensor
BLE 5.3	Yes

## NETWORKING/OPERATING BAND

Operating Band	LTE FDD: Cat M1:B1/B2/B3/B4/B5/B8/ B12/B13/B19/B20/B25/B28/B66/B85 LTE FDD: Cat NB2 B1/B2/B3/B4/B5/ B8/B12/B13/B19/B20/B25/B28/B66/ B71/B85 GSM/EDGE8 850/900/1800/1900MHz
Data Transmission	eMTC: Max. 588Kbps (DL), Max. 1119 (UL) NB1: Max. 32Kbps (DL), Max. 158.5Kbps (UL) EDGE: Max. 296Kbps (DL), Max. 236.8Kbps (UL) GPRS: Max. 107Kbps (DL), Max. 85.6Kbps (UL)

## GNSS SPECIFICATIONS

GNSS Chipset	All-In-One GNSS Receiver
GNSS System	GPS+Glonass +Galileo+ Beidou
Receiver Type	47 tracking/47 acquisitions- channel GNSS receiver
Sensitivity	Cold start: -147 dBm Tracking: -166 dBm
Horizontal Position Accuracy	Autonomous<2m CEP
Position Accuracy (CEP)	Autonomous < 2m
Standalone TTFF	Cold start: < 15s/28s Warm start: < 25s/2s Hot start: < 1s/1s

## AIR INTERFACE PROTOCOL

Transmit Protocol	TCP, UDP, MQTT, SMS
Data Security & Encryption Option	MD5/AES128
BLE Accessory Support	Yes
Scheduled Timing/angle/ distance Report	Report position and status at preset intervals
Geofence	Supports up to 64 internal geo-fence regions
Removal Alarm	Supports up to 31 types of alarms including low power, motion detection, removal etc

## CERTIFICATIONS

CCE, RCM, IC, FCC, PTCRB, AT&T, US Cellular, T-Mobile(on-going), Verizon(on-going)

