

Telic Solar

Telematics device for professional asset tracking applications

The "Telic Solar" is a locating device with a robust IP6k9k housing. It is perfectly suited for the reliable localisation of mobile capital goods like containers, swap bodies, freight wagons, etc. Furthermore, the device can be operated maintenance-free for many years.

The "Telic Solar" - with only 20 mm - is exceptionally flat and small, enabling it to blend perfectly into all common container surfaces without sticking out. Via a specific beam antenna implemented in the "Telic Solar", Bluetooth sensor data from the interior of the container can be received and processed.

The "Telic Solar" is equipped with the proven Telic Tracking Application Software, which allows settings to be made according to the individual wishes of the customer. When required, "Telic Solar" can also be equipped with an individual customised application.

TLS secured payload data is transmitted to cloud services via worldwide LTE Cat M1 or via the 2G mobile network as a backup.

Both communication standards MQTT and LwM2M are supported for data transmission into the cloud.

The robust IP6k9k housing ensures reliable operation even under harsh environmental conditions.

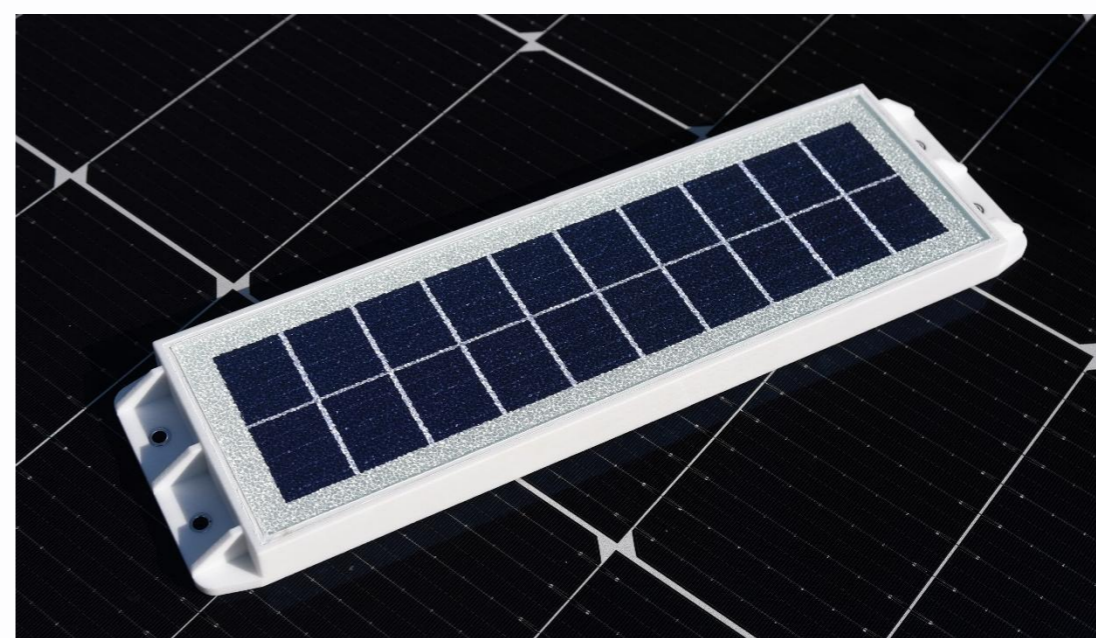
The "Telic Solar" is the ideal device to monitor mobile assets and equipment, thus enabling professional solutions starting with Proof of Concepts (PoC) up to series production.

The perfect all-rounder in the IoT environment

- The powerful solar panel ensures rapid recharging of the battery and makes it possible to bridge long periods of darkness
- Receives sensor data from inside the container via Bluetooth
- Cost-optimised and high performing
- Telic tracking application software included
- State-of-the-art energy management based on long-standing experience with solar powered asset tracking devices since 2012
- Easy installation

Features

- LTE Cat M1 and 2G mobile network as a backup
- Only 20 mm flat and robust IP6k9k housing
- Powerful solar panel (4W)
- Wireless data collection with Bluetooth sensors inside the containers
- Data transmission via LwM2M or MQTT
- Encrypted data transmission TLS 1.3 / DTLS
- Antennas integrated in the housing
- Temperature range -20°C - +65°C



Technical data

Technical overview

Radio module GNSS Antennas	<ul style="list-style-type: none"> Worldwide LTE CAT M1/ radio modem with 2G fallback Navstar GPS, Glonass, Galileo in combined mode Integrated multiband antennas, internal
Data Security Data transmission protocols	<ul style="list-style-type: none"> TLS 1.2, TLS1.3 – DTLS MQTT, LwM2M
Wireless interfaces	<ul style="list-style-type: none"> IEEE 802.15.1 WLAN support 802.11 b/g/n
Energy harvesting by Solar Average energy consumption	<ul style="list-style-type: none"> 4W 0,8Wh per day in tracking mode
Integrated sensors	<ul style="list-style-type: none"> Accelerometer (motion detection), Temperature
Internal battery	<ul style="list-style-type: none"> 8Ah LiPo rechargeable battery
Power saving mode	<ul style="list-style-type: none"> Active by default, timer and motion based
Event trigger	<ul style="list-style-type: none"> Timer and/or motion based Daily inventory messages

Mechanical overview and certificates

Enclosure material	<ul style="list-style-type: none"> PBT-GK20
Temperature range	<ul style="list-style-type: none"> -20C° up to +65C°
Enclosure protection class	<ul style="list-style-type: none"> IP6k9k
Fire protection class	<ul style="list-style-type: none"> UL94V-0
Dimensions	<ul style="list-style-type: none"> 350mm x 100mm x 20 mm
Weight	<ul style="list-style-type: none"> Approx. 640g
CE Marking	<ul style="list-style-type: none"> CE according to RED
Vibration – mechanical shock	<ul style="list-style-type: none"> ISO 16750-3:2012-12 Free fall according to ISO 16750
UV resistance	<ul style="list-style-type: none"> ISO 4892-2- B1
Chemical persistency	<ul style="list-style-type: none"> ISO 16750-5
Environmental testing	<ul style="list-style-type: none"> Various temperature and humidity tests according to ISO 16750-4-5 Dewing EN 60068-2-30:2016-01[a]