

## Telic Solar

### Telematics device for professional asset tracking applications

The "Telic Solar" is a locating device with a robust IP69 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 Bluetooth beam antenna implemented in the "Telic Solar", 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.

The meanwhile almost standardised MQTT protocol is used for data transmission into the cloud. Lightweight M2M can be used alternatively and optionally.

The robust IP69 housing ensures reliable operation even under harsh environmental conditions.

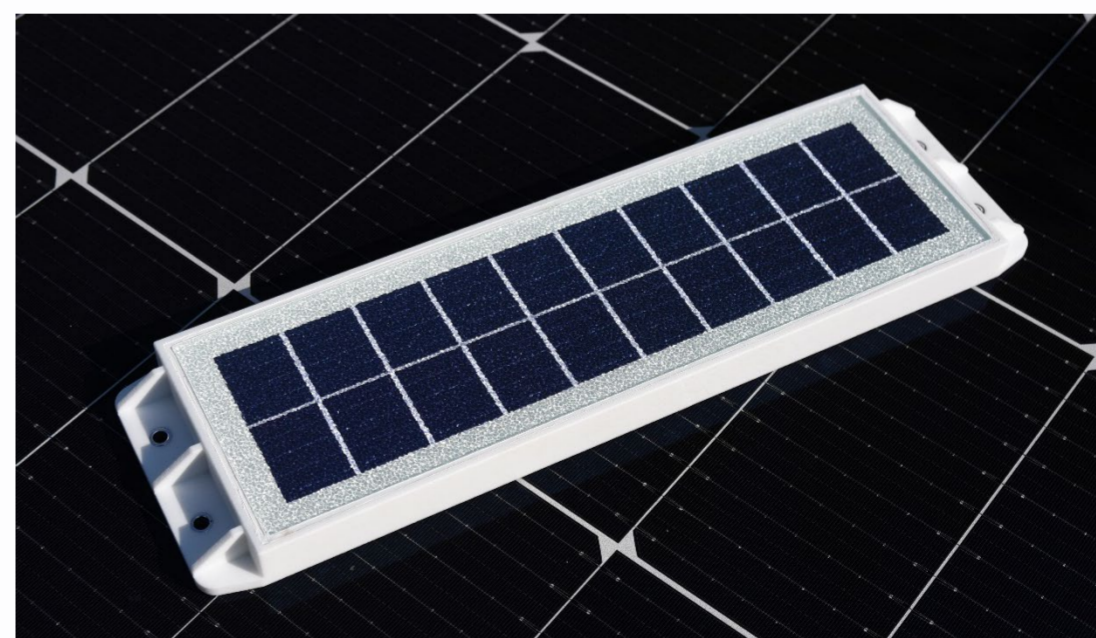
The "Telic Solar" is the ideal device to monitor mobile assets and equipment, thus enabling professional solutions starting with Proof of Concepts (PoC) up to series production.

### The perfect all-rounder in the IoT environment

- Extremely small, flat and robust
- 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 more than 13 years of experience with solar powered asset tracking devices
- Easy installation

### Features

- LTE Cat M1 or 2G mobile network as a backup
- Extremely small, just 20 mm thin and robust IP69 housing
- Powerful solar panel (4W)
- Bluetooth for data collection with sensors inside the containers
- Data transmission via MQTT
- Encrypted data transmission TLS 1.2
- Antennas integrated in the housing
- Temperature range -20°C - +65°C



## Technical data

### Preliminary technical overview about the „Telic Solar“

Radio module	<ul style="list-style-type: none"> <li>Worldwide LTE CAT M1/ NBIoT radio modem with 2G fallback</li> </ul>
GNSS	<ul style="list-style-type: none"> <li>GPS, Glonass, Galileo</li> <li>Integrated multiband antennas</li> </ul>
Data transmission protocols	<ul style="list-style-type: none"> <li>MQTT(TLS encrypted) or optional LWM2M (DTLS) for transmission into the cloud</li> </ul>
Wireless interfaces	<ul style="list-style-type: none"> <li>Bluetooth 4.2</li> <li>WLAN support 802.11 b/g/n</li> </ul>
Performance solar modul	<ul style="list-style-type: none"> <li>4W</li> </ul>
Internal battery	<ul style="list-style-type: none"> <li>8Ah rechargeable battery</li> </ul>

### Mechanical overview and certificates

Temperature range	<ul style="list-style-type: none"> <li>-20C° up to +65C°</li> </ul>
Enclosure protection class	<ul style="list-style-type: none"> <li>IP69</li> </ul>
Dimensions	<ul style="list-style-type: none"> <li>350 x 100 x 20 mm</li> </ul>
Weight	<ul style="list-style-type: none"> <li>Approx. 640g</li> </ul>
Approvals and certificates	<ul style="list-style-type: none"> <li>CE according to RED - Further certificates on demand</li> </ul>