



1 | PRODUCT BRIEF

Sideréal GPS tracks, identifies and reports the status of the assets.

Is designed with a robust material and is resistant to water and extreme temperatures. His battery lasts more than 5 years and it has an identification tag with NFC, RFID and long-distance TAG.

It informs of location, temperature and state of the equipment, and it does so through a Sigfox connection.

1.1 | Technical Features

Weight	240 grams
Dimensions	130 x 60 x 24 mm
IP Code	IP68
Recommended Operating Temperature:	Min: -30 °C Max: 60 °C
Sensors	Voltage, Accelerometer, GPS, Displacement, Hall Effect & Temperature
Embedded technologies	ARM Cortex-M3, Sigfox Connectivity, RFID & NFC
Battery	+5 years *More information in the next pages
Warranty duration	2 years

1.2 | Data provided by the device

Geolocation and tracking, load information, temperature, equipment status, location and zone detection by beacons, motion detection, identification by NFC, RFID and long-distance TAG, disassembly detection, alarm notifications and trip history.

1.3 | Certifications



SIGFOX Module Ready Certification

Class 0: Best radiated power. Device will work perfectly well in all covered areas, indoor and outdoor.



Conformité Européenne (CE)

2| SIGFOX CONNECTION

2.1| Basic information

Sigfox connection can be incorporated through us or on your own.
The **antenna** used for SIGFOX connectivity is an internal Wire.

2.2| Radio Configuration of the product

RC1	Europe, Oman, Iran, South Africa, Tunisia	The product changes depending on the Radio Configuration. Please, indicate it in the purchase.
RC2	USA, Mexico, Brazil	

3| NFC - RFID

Dual **Frequency**: HF 13.56 MHz and UHF 860-960 MHz

International **Standards**:

- ISO/IEC 14443 A, NFC Forum
- ISO/IEC 18000-63 and EPC Gen2 V2

4| MODULE

CPU	ARM Cortex-M3 – Very low consumption
Data encryption	AES encryption engine
Certifications	SIGFOX™ transceiver certified
GNSS Receiver	· Contains an active antenna · Multi-GNSS supported: GPS/GLONASS
Accelerometer	· Ultra-low power 3D accelerometer · Up to ±16g full scale
Hall-Effect	· Ultrasensitive Hall-Effect
RF	+16 dBm output power
Sensitivity	-126 dBm

5| BATTERY

*Batteries are included in the product

Chemical System	Lithium / Iron Disulfide (Li/Fes ₂)
Shelf Life	20 years at 21°C *(On Sidereal GPS the average is until 5 years , depending on the number of msg.)
Certifications	Underwriters Laboratories component recognition (MH29982) II 1G Ex ia IIC Ga Baseefa 14ATEX0107U
Battery	AA (x2)
Total voltage	3V

6| MATERIAL

The structure is made of **Homopolymer Polyoxymethylene** (Delrin)

High **mechanical strength, rigidity** and **hardness**.

High resistance to **shocks** and low temperatures.

Excellent resistance to **gasoline** and other **hydrocarbons**.

Approved for contact with **food**.