

KCS TraceME TM-3001 / SR3 BLE/NFC-tag



The KCS TraceME TM-3001 / SR3 is equipped with BLE and NFC technology targeted for remotely tracking and tracing a variety of assets and for personal identification.

Key Features

- Integrated 2.45GHz. radio for special functions and peripherals. (*)
 - Long range, up to 1km range, line of sight
- Integrated 13.56MHz NFC for remote updates and special functions.
- Very small, only 35 x 25mm
- Lightweight: 1.3 grams for a fully equipped PCB, excl. battery.
- Standby battery lifespan of more than 15 years.
- 3D accelerometer (up to 16g)
- Temperature sensor ($\pm 0.5^{\circ}\text{C}$) (*)
- 1 LED for user interaction. (*)
- Wide operating range: $-30^{\circ}\text{C} \dots +85^{\circ}\text{C}$
- Compatible with Airtag™, Eddystone™ and iBeacon™
- Robust IP67 enclosure (*)
- Multiple watchdog levels for maximum stability.
- Event based free configurable module to fit any job.
- Supports integration into third party networks.

(*) Optional, please contact sales for more details.

Applications

- Object protection
- BLE beacon
- Logistics
- Identification

Product Summary

The KCS TraceME TM-3100 is a Bluetooth Low Energy (BLE) beacon tag targeted for modern tracking and tracing a variety of assets and for personal identification. Government projects and IoT industries like construction, building, transportation and logistical are demanding advanced industrial BLE beacons to integrate into their applications.

The functionality of the module can be remotely programmed to fit any job. From basic/general functionality to advanced/low-level application specific detailed functionality. By default the unit broadcasts its unique ID on a regular interval, allowing proximity information to be detected by BLE beacons in e.g. retail shops and warehouses.

With a minimal size of 35 x 25 mm, weight of only 1.3 grams (excl. battery)/10 grams (incl. 550mAh LiPo) and a battery lifespan of more than 15 years, the module offers endless OEM integration possibilities.

All of the necessary server-side scripts to process and store data from these units are available for registered distributors and resellers. If you do not want to host data and maps yourself, you can use the hosting services of one of our partner companies.

(*) Optional, please contact sales for more details.

Ordering information

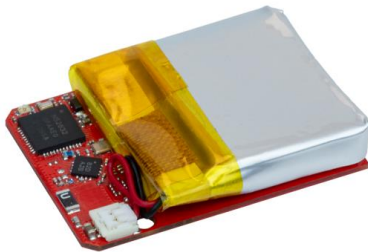
- TM-3001 Basic version (2.45GHz. RF)
- (*) Optional, please contact sales for more details.

Enclosure (*)



Depending on the application, different types of enclosures might be required, which can be provided separately.


Battery (*)



Depending on the application, different battery types and capacities might be required, which can be provided separately.

Specifications KCS TraceME TM-3001

Data communication

RF 2.4GHz.	Nordic nRF52832	
Frequency	2.45 GHz.	
Protocol	BLE 5.1 and custom 2.4 GHz. protocol	
Transmitting power	up to +20 dBm (with on-board amplifier)	
Sensitivity	-96 dBm (BLE)	

Electrical

Power supply	Internal non-rechargeable Lithium battery
Typical power consumption	80mA 7.5mA BLE transmission
	8uA standby, sensors, timer active, no transmissions

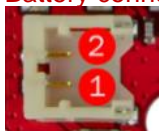
Recommended environmental conditions

Operating Temperature	-30°C to +85°C (OEM)
Humidity	10% to 90%

External Connections



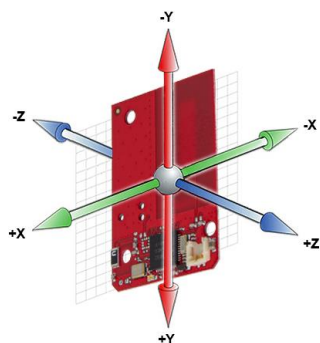
Battery connector



Pin	Description
1	2.5 - 3.6V Battery (+) connection
2	Ground

Onboard sensors

3D accelerometer



The module contains a 3D accelerometer (up to 16g), which can be used for a variety of custom specific (M2M) applications. Accelerometers are useful for measuring movement, speed, g-forces and vibration of the object. The accelerometer and advanced embedded firmware enables a very low-power battery solution.

Temperature sensor (*)

The module contains a temperature sensor ($\pm 0.5^{\circ}\text{C}$), which can be used for example to monitor and control any temperature sensitive equipment.

About KCS BV

KCS BV, founded in The Netherlands in 1984, develops and manufactures electronics in-house for industrial applications, medical purposes, broad-casting solutions, etc.

KCS is ISO 9001:2015 and ISO 14001:2015 certified.



KCS is a LoRa Alliance member since 2016.

Support

Visit our support page at: www.trace.me

Sales

Contact us by email: Trade@trace.me

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