



Powered by the world-leading Nordic nRF54L15 SoC



L02 Sensor Bluetooth 6.0 Beacon

Introducing the L02S, a groundbreaking Bluetooth 6.0 Beacon leveraging the cutting-edge Nordic® Semiconductor nRF54L15 SoC solution. It supports Bluetooth Channel Sounding to ensure precise and secure distance measurements.

The L02 Sensor is a all-in-one sensor which contained temperature&humidity sensor, hall effect sensor, barometric pressure sensor and accelerometer sensor. It can monitor the door status and temperatures of the vehicle or smart housing and broadcasts the data via BLE to be picked up by trackers or BLE gateways and transmitted to server eventually. It can store 50000 groups of sensor data, which is design in response to industry demands for environment monitoring to resolve losses caused by unallowable temperature deviation and unauthorized opening.

Furthermore, equipped with an optional hardware PA (power amplifier), the L02S boosts its transmit power to +20dBm. This enhancement is ideal for long-range and wide-coverage communication applications, expanding its versatility and performance.

Use Cases



Smart Warehousing

- Room level position
- Real-time data updated



Food Industry/Hospital

- More efficient and accurate management
- Data Retention



Inserts
nRF54L15 SoC



Supports
Bluetooth 6.0



Maximum +20dBm
Tx Power



Rotating replaceable
battery



All-in-one sensor
integration

General Specs

Connectivity:	BLE 6.0
Dimensions:	69.9*46.7*18mm
Color:	Gray
Material:	PC
IP rating:	IP67
Sensor:	Temperature&Humidity sensor
	Hall effect sensor
	Accelerometer sensor
	Barometric pressure sensor

Battery capacity:	1000mAh replaceable battery
Flash memory:	2M Bytes
Battery lifespan:	4 years - 5s reporting
Operating temperature:	-20°C to 60°C (Can be extended to -40°C~85°C)
Transmit power:	-46dBm~+8dBm (normally) Maximum to +20dBm (PA optional)
Installation:	Sticker Screw Zip Tie
Certification:	FCC CE RoHS REACH Bluetooth

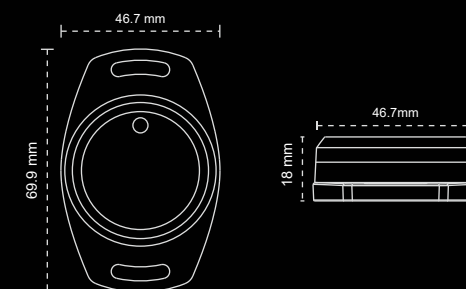
Sensor Specs

Temperature & Humidity sensor

Accuracy tolerance:	±0.2°C(condition: 0°C - 60°C) ±1.8% RH(condition: 20% - 80% RH)
Resolution:	0.1°C 0.1% RH
History storage:	50000 groups

Barometric Pressure Sensor

Pressure measurement range	30kPa - 125kPa
Relative pressure accuracy	±6Pa



FCC STATEMENT

1. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference.

(2) This device must accept any interference received, including interference that may cause undesired operation.

2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.

- Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

- Consult the dealer or an experienced radio/TV technician for help.

RF warning statement:

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.