







Bluetooth Low Energy (BLE)

Advanced Temperature Monitoring

-  IP68 and IP69K ratings
-  Up to 500-meter range in open field
-  Up to 18-year battery life
-  Smart and secure NFC programming
-  Remote OTA management
-  Ultra-compact design for easy installation



Cold-Chain Traceability

Monitor temperature-sensitive goods during transport to ensure cold chain integrity with real-time monitoring, historical data logging, and automatic alerts for compliance and reliability.

Food Safety Compliance

Maintain food safety standards and regulatory compliance with continuous temperature monitoring. Prevent spoilage and ensure product quality with automated temperature logging across production, storage, and distribution.

Pharmaceutical Temperature Monitoring

Limit health risks and maintain compliance with regulatory requirements by accurately monitoring temperature-sensitive pharmaceuticals in first responder fleets or in transit from pharmaceutical companies.

Long-Life Monitoring in Any Environment

The extended battery life, IP69K-rated waterproofing, and over-the-air programming makes the BLE temperature sensor ideal for long-term monitoring in harsh conditions with minimal maintenance.

Bluetooth Low Energy (BLE) Beacon Advanced Temperature Monitoring

The BLE Advanced Temperature Sensor is a compact, high-precision monitoring device designed to track environmental conditions during the transportation of perishable goods and pharmaceuticals. With precision temperature and humidity monitoring, real-time alerts, and historical data logging, this sensor ensures the integrity of your temperature-sensitive products.

Specification

Battery

Power supply	3 VDC - Internal lithium battery
Battery life	Up to 18 years* (0 dBm, 10 sec advertising period), Up to 10 years* (0 dBm, 3 sec advertising period)
Battery level	Low battery warning in advertising frames (<15%), Battery voltage in scan response frames (configurable)

Housing

Dimensions	Ø 57 mm base - Thickness 20 mm
Weight	41g
Materials	DELTRIN (POM C) Compatible with food products (90/128/EEC)
Waterproofness	IP69K & IP68
Operating temperature	-40°C to +85°C

Certifications

Europe	CE / EN 301 489 & EN 55032 / EN 62368-1 / EN12830 (2018), EN13486 calibration certification on demand
UK	UKCA
USA	FCC : FCC PART 15
Canada	ISED : RSS-247 / ICES-003
RoHs/REACH	Yes

Operating Mode

Frequency	2.4 GHz - Bluetooth Low Energy 4.0/4.2
Output power	Up to +4 dBm (configurable)
Range	Up to 500 meters in open field (+4dBm)
Transmission Period	2 advertising periods can be configured (0.1 to 86400 seconds) with threshold-based transitions
Radio frame format	<ul style="list-style-type: none">• ELA ID (15 bytes identifier),• ELA T (15 bytes identifier + 2 bytes Temperature (in 0.01°C))
Parameters & Configuration	Interface/protocol: NFC (Type 2) or Bluetooth connected mode
Connected Mode	Download of 4,000 time-stamped temperature values, Battery level command

SENSORS PERFORMANCE

Range	-10 to +85°C
Resolution	0.0625°C
Accuracy	±0.5°C maximum (-30° to +30°C), ±1°C maximum (-40°C to -30°C & +30°C to +85°C)
Calibration	Configurable 3-point calibration coefficients (Polynomial 2nd degree)