



Motion-Based IoT BLE Tracker

LIVESTOCK TRACKER



PRODUCT DESCRIPTION

The Livestock Tracker is a compact and energy-efficient BLE device designed for reliable asset tracking and movement detection in agricultural and industrial environments.

The device utilizes Bluetooth Low Energy (BLE) iBeacon technology combined with an integrated 3-axis accelerometer to enable intelligent motion-based tracking. It supports Periodic and Autonomous operating modes, dynamically adapting advertising behavior based on movement.

With configurable transmission parameters, extended battery life-time, and optional battery level broadcasting, the tracker ensures flexible deployment for livestock monitoring and IoT applications.

APPLICATIONS

- Livestock Tracking & Monitoring
- Asset Tracking in Agriculture
- Industrial IoT & Smart Farming

FEATURES

- BLE iBeacon-compatible communication
- Motion-based tracking via 3-axis accelerometer
- Dual operating modes (Periodic / Autonomous)
- Ultra-low power consumption
- Configurable advertising interval and TX power
- No-movement reporting (24h beacon signal)

TECHNICAL DATA

BLUETOOTH

Technology	Bluetooth Low Energy
Protocol	iBeacon
RF Power	-20 dBm to +4 dBm
Default RF Power	0 dBm
Distance	Up to 80 m
Indoor Tracking Density	>10 m
Broadcasting Interval	100 ms to 10 s
Advertising Packet	Standard iBeacon / iBeacon with battery level

POWER

Battery	2 × CR2477, 2000 mAh
Power Consumption with Acceleration Sensor	5 µA @ 5 s interval, 0 dBm TX power
Power Consumption without Acceleration Sensor	4.2 µA @ 5 s interval, 0 dBm TX power

BATTERY LIFE

With Acceleration Sensor	13 months, 100ms 119 months, 1.000ms 595 months, 10.000ms
Without Acceleration Sensor	13 months, 100ms 124 months, 1.000ms 600 months, 10.000ms

INTERFACE

Configuration	Bluetooth mobile app
Configuration App	LightBlue
Configurable Parameters	UUID, Major, Minor, Advertising interval, TX power, Acceleration Threshold, Advertising Time, Battery-level Advertising, No-movement 24h Advertising
Data Output	BLE advertising packet

FEATURE

Sensors	Optional 3D acceleration sensor
Operating Modes	Periodic Mode Autonomous Mode
Motion Detection	Configurable acceleration threshold
Battery Level Advert	Supported
No Movement 24h Advert	Supported in Autonomous Mode
Advertising Time	Up to 65,535 s
Pre-Configuration	Available before shipment

PHYSICAL SPECIFICATIONS

Dimensions	82.1 × 63.2 × 21.3 mm
Weight	43 g
Installation	Screw fixation adhesive tape metal wire strap
Housing Protection	IP68

ORDER CODES

VERSIONEN

Livestock NTN Tracker	IOT-BT-LO-AN-5202
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