

Badge Tracker

The Lansitec Cat-1 Badge Tracker is a credit-card-thin tag that blends LTE Cat-1, multi-GNSS and BLE 5.0 for seamless indoor/outdoor visibility of people and moveable assets. A 600 mAh rechargeable cell powers up to 6 months of smart reporting, while a 3-axis accelerometer unlocks fall detection, motion-based power saving and tamper alerts—making it the go-to badge for safety, security and utilisation analytics.

Cat-1 Global Bands

LTE coverage across 25+ bands with MQTT/HTTP(S)/TCP/UDP back-haul.

Dual-Mode Positioning

GNSS (< 2.5 m CEP) outdoors; BLE RSSI (1–3 m) indoors.

Panic & Fall Alarm

Single-press SOS plus auto-trigger on sudden vertical drop.

Geo-Fence & Movement Rules

Configurable zones and idle/active timers cut false alerts.

Ultra-Slim 97 × 62 × 7 mm

35 g ABS housing with NFC for tap-&-go provisioning.

Six-Month Standby

25 µA sleep current and motion-wake logic extend field life.

Edge Filtering & Compression

Byte-level rules minimise cellular data fees.

FOTA via BLE

Firmware upgrades without returning badges to the depot.



iBeacon Broadcasting

The device supports Bluetooth broadcasting using the iBeacon protocol, with a default UUID of F2-A5-2D-43-E0-AB-48-9C-B6-4C-4A-83-00-14-67-FD, and Major/Minor values are the last 4 bytes of the device's DevEUI. The UUID, Major, Minor, Interval, and TX power in the broadcast are all configurable.

SCENARIO



VISITOR MANAGEMENT

Issue temporary badges to contractors or guests; live location and dwell-time logs tighten security and evacuation roll-calls.



EVENT STAFF COORDINATION

Track stewards and medical teams across arenas; heat-maps improve deployment and shorten response times.



CAMPUS ATTENDANCE ANALYTICS



HOSPITAL STAFF ROUNDS

Combine entry tap (NFC) with zone presence to verify class attendance and optimise lecture-hall utilisation.

BLE indoor accuracy tags nurses and doctors; motion alerts verify routine rounds and shorten emergency response.

SPECIFICATIONS

Bluetooth

Bluetooth Protocol	5.0, iBeacon, Eddystone, private
Bluetooth TX Power	-20 to +4 dBm TX power, configurable in 4 dBm steps
Bluetooth Sensitivity	-96dBm
Bluetooth Positioning Accuracy	3m
Advertise Interval	100ms ~ 10s adjustable
Coverage Range	150m sight distance

Cat- 1

Regions	North America	Europe / Africa	China / India	Latin America
FFD	B2/B4/B5/B12/B13/B66	B1/B3/B5/B7/B8/B20	B1/B3/B5/B8	B2/B3/B4/B5/B7/B8/B28/B66
TTD	N/A	N/A	B34/B38/B39/B40/B41	N/A
SIM Card	Nano or eSIM			
Protocol	MQTT, HTTP(S), TCP, UDP			

GNSS

GNSS	BEIDOU/GALILEO/GPS/GLONASS/QZSS/SBAS (WAAS, EGNOS, GAGAN, MSAS)
GNSS Position Accuracy	<2.5m CEP
Cold Start Duration	30s to 60s
AGPS	Support

Mechanics

Dimension	95*61*7mm
Operating Temperature	-10°C~+65°C
Storage Temperature	-20°C~+80°C
Operating Humidity	5% ~ 95% (non-condensing)
Housing Material	ABS
Weight	35g

Power

Battery	Li-ion rechargeable battery, 600mAh
GNSS (report interval >10minutes)	Approx. 600 times
Bluetooth Positioning	Approx. 2000 times
Standby Current	25µA
Max. Current	200mA

Functions

Adjustable Position Report Interval	5s x n (1 to 65536)
Heartbeat Report Interval	30s x n (1 to 65536)
Switch	Mechanical
Temperature Report	Optional, please advise Lansitec upon ordering
Temperature Sensor Range	-40°C~+85°C
Temperature Accuracy	Chamber temperature in the beacon, ±5°C
Temperature Resolution	0.25°C
Tamper Detection	Support
FOTA over Bluetooth	Support
Movement Duration	Support
Vibration Shock Detection	Support
Asset Management with Bluetooth Tags	Support (report nearby Bluetooth tags)
Offline Cache Position (40 Positions)	Support
3D Accelerometer	Support
NFC Tag	1KB
Cellular-based Positioning	Support
Configurable Bluetooth data filter and payload report	Filter any data bytes in a Bluetooth payload and report any via Cat-1
Bluetooth data compression	Support

ORDERING INFORMATION

Product Description	Part Number
Badge tracker, Cat-1, Bluetooth 5.0, GNSS, 95*61*7mm, Li-ion 600mAh	100-00C12