

Asset Management Tracker

The Cat-1 Asset Management Tracker unites multi-GNSS, BLE 5.0 and LTE Cat-1 for always-connected indoor & outdoor asset intelligence. Its twin 4 000 mAh Li-SOCI2 cells (8 000 mAh total) power up to 3+ years of adaptive reporting inside an IP68, palm-sized enclosure. Motion sensors, tamper switch and door-open detection transform raw position pings into actionable utilisation data—ideal for containers, transit cases and unattended machinery.



Global Cat-1 Coverage

25 + FDD bands with MQTT / HTTP(S) / TCP / UDP uplinks.

Dual-Mode Positioning

< 2.5 m CEP by GNSS outdoors; 3 m BLE RSSI indoors.

Edge Smart Rules

Geo-fence, motion duration, shock, door and tamper alerts on board.

Ultra-Long Autonomy

15 µA sleep current yields 30 k GNSS or 500 k BLE reports.

Offline Cache & Burst

Stores 40 locations when out of coverage, uploads on reconnect.

Asset BLE Tag Sync

Inventories nearby beacons to know what is inside each case.

Wide Temp Range

-45 °C ... +85 °C operation, waterproof-coated PCB.

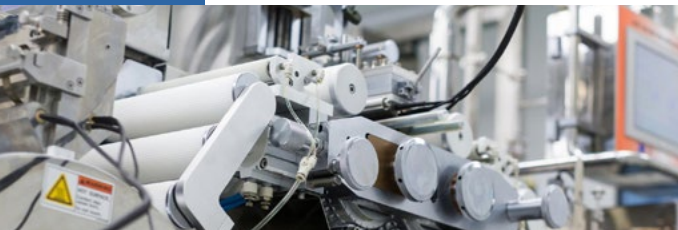
FOTA & NFC Provisioning

Firmware upgrades and tap-to-pair setup without unsealing.

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



MACHINE-STATUS MONITOR

Correlate vibration hours and shock spikes to schedule maintenance and prevent downtime.



COLD-CHAIN COMPLIANCE

Pair with BLE temperature probes inside vaccine coolers; Cat-1 pushes threshold breaches instantly.



MUSEUM & EXHIBIT SECURITY



CONTAINER TRACKING

Shock-, motion- and door-sensing safeguard priceless artifacts during transit and storage.

Real-time GNSS & door-open alerts secure sea-rail containers through ports, depots and yards.

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	78x79x35mm with the mounting lugs; 78x66x35mm without the mounting lugs
Ingress Protection	IP68
Weight	133g
Operating Temperature	-45°C ~ +85°C
Storage Temperature	-60°C ~ +90°C
Operating Humidity	0% ~ 95% (non-condensing)
Housing Material	PC and ABS
PCB Coating	Water proof coating

Power

Battery	Li/SOCI2 4000mAh x 2
GNSS (report interval > 10minutes)	Approx. 30,000 times
Bluetooth Positioning	Approx. 500,000 times
Standby Current	15µA
Max. Current	145mA

Functions

Adjustable Position Report Interval	5s x n (1 to 65536)
Heartbeat Report Interval	30s x n (1 to 255)
GNSS Position Report Interval	5s x n (1 to 65536)
FOTA over Bluetooth	Support
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
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
Asset Management Tracker, Cat-1, BLE5.0, 78x66x35mm, IP66, 2x4000mAh	100-000C4
Certification	CE, FCC