

## Asset Management Tracker

Optimize how you track, monitor, and safeguard high-value items with the Lansitec Asset Management Tracker. Featuring GNSS, Bluetooth 5.0, and LoRaWAN technology, this device delivers accurate indoor and outdoor positioning—ensuring full visibility of assets ranging from shipping containers and transit cases to industrial machinery. Its IP68-rated enclosure and ultra-long battery life provide dependable performance in harsh conditions, while features like tamper detection, door open/close sensing, and vibration monitoring strengthen security and operational oversight. Whether you're managing remote equipment, monitoring valuable shipments, or consolidating on-site inventory, the Asset Management Tracker helps you stay informed in real time, reduce losses, and streamline processes.

### Multi-Technology Positioning

Combine GNSS for outdoor tracking and Bluetooth 5.0 for indoor positioning, ensuring continuous visibility across varied environments.

### IP68 Rugged Enclosure

Shield the device against water, dust, and extreme temperatures for reliable performance in challenging conditions.

### Ultra-Long Battery Life

Dual Li/SOCI2 4000mAh batteries enable thousands of position updates, minimizing maintenance and device downtime.

### Tamper & Door Open/Close Detection

Receive immediate alerts if the device is removed or if a container door is opened unexpectedly.

### Comprehensive Movement & Vibration Monitoring

Track operational hours, detect shock events, and know when machinery is moved or used outside set parameters.

### Asset Management with BLE Tags

Maintain a real-time inventory of items stored within containers or transit cases by reporting nearby Bluetooth tags.



### Offline Cache & FOTA

Store up to 40 position logs when out of network range and update firmware over Bluetooth to keep the device secure and current.

### Adjustable Reporting Intervals

Configure position or heartbeat intervals to match your operational needs, saving power while providing timely data.

### 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 MONITORING**

Observe vibration levels, total usage time, and movement patterns for machinery, enabling preventive maintenance and optimal utilization.



**GENERAL ASSET MANAGEMENT**

Keep tabs on critical inventory—even in remote sites—by leveraging LoRaWAN for wide coverage and Bluetooth for detailed proximity data.



**OFF-SITE EQUIPMENT DEPLOYMENT**



**EMERGENCY RESPONSE READINESS**

Track items loaned or leased to third-party locations, ensuring you know where your assets are and how they're being used at all times.

Secure vital rescue or medical supplies. The tracker's tamper detection and door sensing ensure equipment remains sealed and ready for immediate deployment.

## SPECIFICATIONS

### Connectivity

|                           |   |
|---------------------------|---|
| <b>Bluetooth Protocol</b> | 5.0, iBeacon                            |
| <b>RF Power</b>           | -20~+4 dBm, configurable in 4 dBm steps |
| <b>Sensitivity</b>        | -96dBm                                  |
| <b>Advertise Interval</b> | 100ms ~ 10s adjustable                  |
| <b>Coverage Range</b>     | 150m sight distance                     |

### LoRaWAN

|                                    |   |
|------------------------------------|---|
| <b>LoRaWAN Protocol</b>            | 1.0.2B, Class A   |
| <b>Activation Mode</b>             | OTAA or ABP   |
| <b>LoRa Frequency</b>              | US915, AU915, EU868, EU433, AS923, RU864, KR920, IN865, CN470 |
| <b>LoRa TX Power</b>               | 0 to 20dBm  |
| <b>LoRa Sensitivity</b>            | -137dBm @SF12, BW125kHz, 868MHz/915MHz                        |
| <b>LoRa Communication Distance</b> | >1km in urban area  |
| <b>Encryption</b>                  | AES128  |

### GNSS

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

### Mechanics

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

## Power

|  |                      |
|--|----------------------|
| <b>Battery</b>                               | Li/SOCI2 4000mAh x 2 |
| <b>GNSS (report interval &gt; 10minutes)</b> | Approx. 16,000 times |
| <b>Bluetooth Positioning</b>                 | Approx. 36,000 times |
| <b>Standby Current</b>                       | 60µA                 |
| <b>Max. Current</b>                          | 450mA                |

## Functions

|  |   |
|--|---|
| <b>Configurable Bluetooth data filter and payload report</b>     | Filter any data bytes in a Bluetooth payload and report any via LoRaWAN |
| <b>Adjustable Position Report Interval</b>                       | 5s x n (1 to 65536)   |
| <b>Heartbeat Report Interval</b>                                 | 30s x n (1 to 65536)  |
| <b>Switch</b>  | Mechanical  |
| <b>Temperature Report</b>  | Optional, please advise Lansitec upon ordering                          |
| <b>Temperature Sensor Range</b>                                  | -40°C~+85°C   |
| <b>Temperature Accuracy</b>                                      | Chamber temperature in the beacon, ±5°C                                 |
| <b>Temperature Resolution</b>                                    | 0.25°C  |
| <b>Tamper Detection</b>  | Support   |
| <b>FOTA over Bluetooth</b>                                       | Support   |
| <b>Movement Duration</b>   | Support   |
| <b>Door Open/Close Sensing</b>                                   | Support   |
| <b>Vibration Shock Detection</b>                                 | Support   |
| <b>Asset Management with Bluetooth Tags</b>                      | Support (report nearby Bluetooth tags)                                  |
| <b>Offline Cache Position (40 Positions)</b>                     | Support   |
| <b>Mechanical Power Switch Enable/Disable</b>                    | Support   |
| <b>3D Accelerometer</b>  | Support   |
| <b>NFC Tag</b>   | 1KB   |
| <b>Multiple Bluetooth gateway LoRaWAN report synchronization</b> | Sync the clock and LoRaWAN report                                       |
| <b>TDMA</b>  | Support   |
| <b>Bluetooth Data Compression</b>                                | Support   |

## ORDERING INFORMATION

| Product Description   | Part Number |
|---|-------------|
| Asset Management Tracker, LoRaWAN, Bluetooth 5.0, GNSS, 78x66x35mm, 2x4000mAh, IP66 | 100-00165   |