

BT-330

LTE-M / NB-IoT

Ultra-rugged, long-life battery-powered GPS asset tracking device and Bluetooth® Gateway featuring 'Second-by-Second' tracking for real-time applications

Longest-lasting battery-powered device on the market



'Second-by-Second' Tracking

'Deploy Once' battery life and new 'Second-by-Second' tracking performance to support aggressive and/or extended reporting requirements, including highly accurate speeding, run hour, and odometer monitoring

Bluetooth® 5.2 Gateway

Reports on nearby Bluetooth tags and sensors for affordable tagged asset management and sensor monitoring applications

User-Replaceable Batteries

Uses off-the shelf 2 x D Lithium Thionyl Chloride (LTC) batteries for extreme temperature operation

Adaptive Tracking

Periodic or optional movement-based tracking - tracks assets throughout the day and/or when movement occurs, entering sleep mode when inactive to conserve power and data usage

Battery Life Alerts

Battery Meter with "Battery Low" and "Battery Critical" alerts

Tamper Detection

Magnetic Tamper Detection

Ultra-Rugged

Ultra-rugged and waterproof IP68 and IK07-rated housing ensures device can withstand impact, fine dust, and brief submersion

Connectivity

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| LTE-M / NB-IoT | Nordic nRF9160 Modem operates on all major global LTE-M and NB-IoT bands. Supported LTE bands: |
| (supports roaming between networks - roaming SIM required) | LTE-M (Cat-M1): B1, B2, B3, B4, B5, B8, B12, B13, B14, B17, B18, B19, B20, B25, B26, B28, B66 NB-IoT (Cat-NB1/NB2): B1, B2, B3, B4, B5, B8, B12, B13, B17, B19, B20, B25, B26, B28, B66 |
| Bluetooth® 5.2 Gateway | Bluetooth 5.2 gateway reports nearby Bluetooth tags and sensors for affordable tagged asset management and sensor monitoring |
| SIM Size & Access | Internal Nano 4FF SIM |

Batteries

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| User-Replaceable Batteries | 2 x D Cell (3.7V per cell). <i>Batteries not included.</i> |
| Supported Battery Types | Lithium Thionyl Chloride (LTC) *Please dispose of Lithium batteries in a safe and responsible manner |
| *Battery Life Estimates | Once Daily location updates - *20+ years Movement-Based location updates - 10+ years Hourly location updates - 10+ years |

* For battery life estimates over 10 years, please consider network technology availability and other factors such as battery manufacturer lifespans and self-discharge specifications. Battery life estimates are influenced by several factors including temperature, installation and orientation of the device, the frequency of location updates, network coverage, sensor integrations, peripherals, accelerometer settings, and more.

Location

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| GNSS Module | SONY CXD5612 |
| Constellation | Concurrent GPS, GLONASS, Galileo, QZSS, Beidou |
| Tracking Sensitivity | -149dBm cold start / -163dBm hot start |
| *Location Accuracy | ~1m 2D RMS, GPS, -130dBm |
| GNSS Assistance | GNSS almanac and ephemeris data for greater sensitivity and position accuracy |
| Low Noise Amplifier | GPS signals are filtered and boosted by a SAW filter and low-noise amplifier (LNA) allowing operation where other units fail |
| Cell Tower Location | Cell tower location fallback for positioning when GPS can't get a fix |

* Positioning accuracy specifications are provided by the GNSS supplier and reflect ideal conditions. Device configuration, installation, environmental conditions, augmentation services, and many other factors may lead to variations in positioning accuracy.

Power

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| Input Voltage | 5-16V DC |
| Sleep Current | <10uA* *Average current in lowest power configuration |
| Safety | Reverse Polarity Protection and Fuse Protection |

Mechanics / Design

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| Dimensions | 222 x 91 x 41 mm (8.74 x 3.58 x 1.61") |
| Weight | 430g |
| Housing | Non-branded housing for optional white-labeling |
| IP/IK Rating | Ultra-rugged and waterproof IP68 and IK07-rated housing ensures the BT-330 can withstand impact, fine dust, and brief submersion |
| Installation | Compact and concealable. Multiple installation options for covertly and easily securing the device to assets with screws, bolts, cable ties, rivets, and more. Stainless steel screws provided. |
| Operating Temperature | -30°C to +60°C |
| Cellular Antenna | Internal |
| GPS Antenna | Internal |
| 3-Axis Accelerometer | 3-Axis Accelerometer to detect movement, high G-force events, and more |
| Diagnostic LED | Diagnostic LED indicates operation status |
| Flash Memory | Store weeks of records if device is out of cellular coverage. Storage capacity for over 20 days of continuous 30-second logging. |
| On-Board Speed and Heading | Current speed and heading is reported with each position update |
| On-Board Temperature | The device reports internal temperature which provides an indication of ambient temperature but may not always be precise |

Smarts

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| Auto-APN | Auto-APN allows the device to analyze the SIM card and select the correct APN details from a list that is pre-loaded in the device's firmware |
| Battery Life Monitoring | Battery Meter with "Battery Low" and "Battery Critical" alert levels |
| Geofence Alerts | The server can use device location to create geofences and alerts if an asset enters or leaves designated locations |
| Geofence Download to Device | Geofences can be downloaded directly to the device for enhanced location-based actions and alerts. Maximum of 500 Geofences with up to 100 points per geofence. |
| Impact Detection | Configure impact-detection alerts when G-forces are exceeded by a user-defined threshold |
| Intelligent Power Management | Early registration abort and location scan throttling options |
| Periodic or Movement-Based Tracking | Configure parameters to send updates based on set time intervals or when movement occurs. Adaptive tracking technology detects when the device is on the move and increases the update rate, providing detail when you need it while conserving battery when stationary. |
| Preventative Maintenance | Set reminders based on distance traveled and run hours to reduce maintenance and repair costs |
| Rotation Counting | Keeps a count of the number of rotations of the device about the Z axis |
| Run Hour Monitoring | Capture run hours based on movement to understand and optimize asset utilization |
| Sleep Mode | Stationary devices enter sleep mode until movement occurs to conserve battery life and optimize data usage |
| Tamper Alerts | Magnetic tamper switch provides an instant alert if the device is removed from your asset |
| Theft Recovery | Switch to Recovery Mode in the case of theft or loss to activate real-time tracking for asset retrieval |
| Tip Detection | Define a range of angles that constitutes a 'tipped' state and configure alerts |

Device Management

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| Flexible Configuration | Configure device parameters such as position update rate, movement and accelerometer settings, and more to fit any tracking application |
| Device Management Platform | Manage, monitor, configure, debug, update, and restart devices remotely from our cloud-based device management system |
| Configuration App | Configurable with DMLink Provisioning tool |

Integration

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| Third-Party Integration | TCP Direct or HTTPS Webhook |
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Security

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| Data Security | Military-level AES-256 Encryption from device to Device Management Platform to protect the integrity and confidentiality of telematics data. Data forwarded to third-party systems is sent via HTTPS for end-to-end security. |
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Warranty

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| Manufacturer's Warranty | Two-year manufacturer's warranty |
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Certifications

FCC (in progress), ISED, CE, ICASA, ACMA RCM, EMC, RoHS
