

# YabbyEDGE

## LTE-M / NB-IoT

Ultra-rugged and compact Indoor/Outdoor asset tracker. Features cloud-based location solving for 10+ years of battery life.



 **Indoor/Outdoor**  
GNSS, Wi-Fi AP MAC AddressScanning, and Cell Tower location fallback for seamless indoor/outdoor asset management

 **'Deploy Once' Battery Life**  
Over 10+ years battery life on only 3 x AAA user-replaceable batteries

 **Cloud-Based Location**  
Position calculations are handled in the cloud (versus on-device) for substantial power savings

 **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 Low" and "Battery Critical" alerts

 **Ultra-Rugged**  
IP67 rated housing ensures the device can withstand fine dust, high-pressure spray, submersion for 30 minutes in 1m of water

# Connectivity

LTE-M / NB-IoT  
(supports roaming between networks - roaming SIM required)

Nordic nRF9160 Modem operates on all major global LTE-M and NB-IoT bands.

Supported LTE bands:

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

SIM Size & Access

Internal Nano 4FF SIM

# Batteries

User-Replaceable Batteries 3 x AAA

Supported Battery Types Alkaline  
Lithium (LiFeS2) – Lithium recommended for best performance  
\*Please dispose of Lithium batteries in a safe and responsible manner

Battery Life Once Daily location updates – 10+ years  
Movement-Based location updates – 4 years  
Hourly location updates – 2 years

# Location

Chipset Semtech LR1110

Constellation Concurrent GPS and BeiDou

Cloud-Based Solver Asset location is calculated in Digital Matter's Location Engine

Tracking Sensitivity -134 dBm autonomous / -141 dBm aided

GNSS Assistance GNSS almanac 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 fallback for positioning when there is no GNSS or Wi-Fi signal

Wi-Fi Positioning Indoor asset location using Wi-Fi access point scanning (device does not connect to Wi-Fi)

# Power

Input Voltage 3-5.5V DC

Sleep Current <10uA\*  
\*Average current in lowest power configuration

# Mechanics / Design

Dimensions Standard - 85 x 63 x 24 mm (3.35 x 2.48 x .94")  
Livestock Collar - 109 x 60 x 30 (4.29 x 2.36 x 1.18")  
Snap Housing (Smallest Size, not IP67 rated) - 75 x 45 x 25 mm (2.95 x 1.77 x 0.98")

Weight Standard - 82 g (2.9 oz)

Housing Ultra-Rugged IP67 Housing. Non-branded housing for optional white-labelling.

# Mechanics / Design *(continued)*

IP Rating	IP67 rated housing ensures device can withstand fine dust, high-pressure spray, submersion for 30 mins in 1m of water, and extreme temperatures
Installation	Compact and concealable. Multiple installation options for covertly and easily securing the device to assets with screws, bolts, cable ties, rivets, and more. Collar housing available for securing device to livestock.
Operating Temperature	-30°C to +60°C - for operation in extreme temperatures use Lithium Batteries
Cellular Antenna	Internal
GPS Antenna	Internal
Wi-Fi 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 5 days of continuous 30-second logging.
Speed and Heading	Scanning technology used on the Yabby Edge does not return speed and heading
On-Board Temperature	The device reports internal temperature which provides an indication of ambient temperature but may not always be precise

## Smarts

Auto-APN	Auto-APN allows the device to analyse 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 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
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
Run Hour Monitoring	Capture run hours based on movement to understand and optimise asset utilisation
Sleep Mode	Stationary devices enter sleep mode until movement occurs to conserve battery life and optimise data usage
Theft Recovery	Switch to Recovery Mode in the case of theft or loss to activate real-time tracking for asset retrieval
Tip Detection & Rotation Counting	Axis angle reporting, tip detection and rotation counting

## Device Management

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

# Integration

---

Third-Party Integration	HTTPS Webhook
Cloud-Based Solver	Location Engine makes it easy to perform cloud-based position solving and integrate data into any system
Configuration App	Configurable with DMLink Provisioning tool

---

# Security

---

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

---

# Warranty

---

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

---

# Certifications

---

Please contact our support team for a full list of compliance specifications and documentation for your region

---