

Yabby Edge LoRaWAN®

All 868, 902-928MHz LoRaWAN regions supported

Low cost, Indoor/Outdoor asset tracker with industry-leading battery life and cloud-based location solving in a small rugged IP67 housing



Indoor/Outdoor

GNSS, Wi-Fi AP MAC Address Scanning, and LoRaWAN® geolocation with cloud-based location solving



12 Years Battery Life

Game-changing battery life with up to 12 years on only 2 x AAA user-replaceable batteries



Movement-Based Tracking

Tracks assets when they're on the move and enters sleep mode when stationary to save power



Ultra-Rugged

Weatherproof and ultra-rugged IP67 Housing



Low Cost

Low cost to support large-scale deployments



Connectivity

LoRaWAN	Highly sensitive radio receiver is available in 868 or 902 - 928 MHz versions
LoRaWAN Regions	AU915 AS923-1 AS923-2 AS923-3 EU868 IN865 KR920 RU864 US915

Batteries

User-Replaceable Batteries	2 x AAA
Battery Life	Up to 12 years of battery life at once-daily position updates, 3 years battery life at once-hourly position updates. Enable intelligent movement-based tracking for longer battery life.
Supported Battery Types	Lithium (LiFeS2) - recommended *Please dispose of Lithium batteries in a safe and responsible manner

Location

Chipset	Semtech LR1110
Constellation	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 boosted by a unique low-noise amplifier (LNA) allowing operation where other units fail
WiFi Positioning	Indoor asset location using WiFi access point scanning
LoRaWAN Gateway Geolocation Fallback	LoRaWAN gateway geolocation fallback when there is no GNSS or WiFi signal

Power

Input Voltage	2-3.6V 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")
------------	---

Mechanics / Design *(continued)*

Weight	Standard - 82 g (2.9 oz)
Housing	Ultra-Rugged IP67 Housing
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	-20°C to +60°C
GPS Antenna	Internal
RF Antenna	Internal
WiFi Antenna	Internal
3-Axis Accelerometer	3-Axis Accelerometer to detect movement, high G-force events, and more
Diagnostic LED	Diagnostic LED signifies operation status
On-Board 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

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
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.
Sleep Mode	Stationary devices enter sleep mode until movement occurs to conserve battery life and optimize data usage

Device Management

Flexible Configuration	Configure device parameters such as position update rate, movement and accelerometer settings, and more to fit any tracking application
Configuration App	Manage device firmware updates and parameters via a USB configuration cable and app. Some parameters can be changed via downlink.

Integration

Third-Party Integration	Easy integration with comprehensive documentation and a flexible and open payload format
Cloud-Based Solver	Digital Matter's Location Engine makes it easy to perform cloud-based position solving and integrate data into any system

Security

Data Security	LoRaWAN networks use AES-128 Encryption so your data is protected
---------------	---

Warranty

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

Certifications

Please visit our knowledge base for a full list of compliance specifications and documentation for your region	Coming Soon
--	-------------
