# YABBY EDGE LORAWAN®

868 or 902-928 MHz versions

- High-performance, high-precision Indoor/Outdoor GPS asset tracking device for LoRaWAN networks
- Powered by 2 x AAA user-replaceable batteries with 10+ years battery life
- Indoor/Outdoor location based on GNSS and Wi-Fi Access Point scanning data
- Intelligent power management with cloud-based location solving and battery life monitoring













'Deploy Once' Battery Life

Ultra-Rugged & Waterproof

Outdoor Location

Highly Configurable

868 or 902-928 MHz

White-Label & Integration Ready

#### **Asset Visibility**

Monitor asset location and movement within LoRaWAN Gateway coverage.

#### **Battery Life Monitoring**

Periodic battery status uplinks give a breakdown of power use.

#### **Adaptive Tracking**

Automatically adapt reporting rate when asset is mobile or stationary to conserve battery life.

### Wire-Free Installation

Multiple installation options for securing device to asset or concealing within.

#### **Geofence Alerts**

Receive notification if asset enters or exits designated locations.

# Track Longer with Industry-Leading Battery Life

| Location Updates        | 1 x Daily | 1 x Hourly | Movement-<br>Based** |
|-------------------------|-----------|------------|----------------------|
| Estimated Battery Life* | 12 Years  | 3 Years    | 1 Year               |

#### LOGISTICS | EQUIPMENT | BINS & CONTAINERS | MEDICAL | TOOLS | LIVESTOCK | & MORE

<sup>\*</sup> Battery life estimates are influenced by several factors including temperature, installation and orientation of the device, battery selection, the frequency of location updates, network coverage, sensor integrations, peripherals, accelerometer settings, and more.

<sup>\*\*</sup> Devices can be configured to provide more frequent location updates when the asset is in motion. Movement-based estimates are based on 2 hours of movement daily, 5 days a week.

## Connectivity

| LoRaWAN | Highly sensitive radio transceiver is available in 868 or 902 - 928 MHz versions. |
|---------|---|
| Regions | AU915   |
| _       | AS923-1   |
|         | AS923-2   |
|         | AS923-3   |
|         | AS923-4   |
|         | EU868   |
|         | IN865   |
|         | KR920   |
|         | RU864   |
|         | US915   |

### Location

| Chipset                 | Semtech LR1110  |
|-------------------------|---|
| Environment             | Indoor/Outdoor  |
| Constellations          | Concurrent GPS, BeiDou  |
| 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. |
| Wi-Fi Location Scanning | Indoor asset location using Wi-Fi access point scanning.  |
| Cloud-Based Solver      | Asset location is resolved using Digital Matter's Location Engine.  |

#### **Power**

| User-Replaceable Batteries 2 x AAA. Batteries not included. Widely available at most hardware or retail locations. |
|--|
|--|

| Supported Battery Types | Lithium  Battery selection is very important. <u>Follow this link to learn more.</u> Please dispose of Lithium batteries in a safe and responsible manner. |
|-------------------------|--|
| Battery Life Estimates* | Once Daily location updates – 12 years  Movement-Based location updates** – 1 year  Hourly location updates – 3 years                                      |
| Sleep Current           | <10uA<br>Average current in lowest power state.  |

<sup>\*</sup> Battery life estimates are influenced by several factors including temperature, installation and orientation of the device, battery selection, the frequency of location updates, network coverage, sensor integrations, peripherals, accelerometer settings, and more. Battery life calculators are available at support.digitalmatter.com.

### **Mechanics / Design**

| Dimensions           | Standard Housing - $84 \times 63 \times 24 \text{ mm}$ (3.31 x 2.48 x 0.94 in)<br>Livestock Collar Housing - $109 \times 60 \times 30 \text{ mm}$ (4.29 x 2.36 x 1.18 in)  |
|----------------------|--|
| Housing              | Non-branded nylon glass housing is suitable for white labeling.  |
| IP/IK Rating         | Ultra-rugged and waterproof IP68 and IK06-rated housing ensures the device 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. Collar housing available for securing device to livestock. |
| Temperature Range    | Operating: -30°C to +60°C<br>Recommended Storage: 10°C to 30°C, Humidity 30%.<br>Store in a cool, dry place.   |
| GPS Antenna          | Internal   |
| RF Antenna           | Internal   |
| Wi-Fi Antenna        | Internal   |
| 3-Axis Accelerometer | 3-Axis accelerometer to detect movement.   |

<sup>\*\*</sup> Movement-based estimates are based on 2 hours of movement, occurring 5 days a week, with default trip tracking parameters (location updates every 3 minutes and uploads every 30 minutes). Devices can be configured to provide more frequent location updates when the asset is in motion which will impact battery life.

| Diagnostic LED indicates operation status.   |  |
|--|--|
| Scanning technology used on this device does not return speed or heading.  |  |
|  |  |
|  |  |
| 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. |  |
| Periodic battery status uplinks give a breakdown of power use.   |  |
| The server can use device location to create geofences and alerts if an asset enters or leaves designated locations.   |  |
| Stationary devices enter sleep mode until movement occurs to conserve battery life and optimize data usage.  |  |
|  |  |
| Configure device parameters such as position update rate, movement and accelerometer settings, and more to fit any tracking application.   |  |
| Manage device firmware updates and parameters via DMLink provisioning tool. Some parameters can be changed via downlink.   |  |
|  |  |
|  |  |
| HTTPS Webhook  |  |
|  |  |
|  |  |
|  |  |

### Warranty

Manufacturer's Warranty

Two-year manufacturer's warranty. Exclusions apply.

#### **Certifications**

Please view our knowledge base for <u>regulatory and network certifications</u>.