Yabby GPS

Cellular 2G or LTE-M / NB-IoT

Tiny, lightweight and ultra-rugged battery-powered GPS tracking device with up to 3 years of battery life for asset tracking and theft recovery

3 Years Battery Life

Powered by 3 x AAA Batteries with up to 3 years battery life

Movement-Based Tracking

High-precision GPS/GLONASS tracking device 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

User-Replaceable Batteries

Uses off-the-shelf Lithium batteries

Connectivity

2G	2G: SARA-G350-02S-01 850/900/1800/1900 MHz
LTE-M / NB-IoT	uBlox SARA-R410M Modem operates on all major global LTE-M and NB-IoT bands. Supported LTE bands: 1*, 2, 3, 4, 5, 8, 12, 13, 18, 19, 20, 26*, 28 (*roaming bands)
SIM Size & Access	Internal Nano 4FF SIM

Batteries

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

Location

Module	uBlox EVA-M8
Constellation	Concurrent GPS / GLONASS
Channels	72 Channel High Sensitivy Receiver
Tracking Sensitivity	-167 dBm industry-leading tracking performance (-148dBm cold start, -157dBm warm start)
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
Cell Tower Location	Cell tower fallback for positioning when GPS fails

Power

Input Voltage	4-6V 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”)
Weight	101 g (3.56 oz)
Housing	ABS Polycarbonate Plastic

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	-20°C to +60°C
GPS Antenna	Internal
Cellular Antenna	Internal
3-Axis Accelerometer	3-Axis Accelerometer to detect movement, high G-force events
Diagnostic LED	Diagnostic LED signifies operation status
Flash Memory	Store weeks of records if device is out of cellular coverage. Storage capacity for over 10 days of continuous 30-second logging.

Smarts

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
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 from Telematics Guru for enhanced location-based actions and alerts. Maximum of 100 Geofences with up to 100 points per geofence.
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.
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 optimize asset utilization
Sleep Mode	Stationary devices enter sleep mode until movement occurs to conserve battery life and optimize data usage
Theft Recovery	Switch to Recovery Mode in the case of theft or loss to activate real-time tracking for asset retreival

Device Management

Flexible Configuration	Configure device parameters such as position update rate, movement and accelerometer settings, and more to fit any tracking application
OEM Server	Manage, monitor, configure, debug, update, and restart devices remotely from our cloud-based device management system

Integration

Third-Party Integration	TCP Direct or HTTPS Webhook

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	One year manufacturer's warranty

Certifications

Please contact us for a full list of compliance specifications and documentation for your region.	**LTE-M / NB-IoT** - FCC, ISED, ACMA (DoC), VERIZON, CE (Doc) **2G** - ICASA, CE (Doc)