

Oyster

EDGE

LTE-M / NB-IoT

Ultra-rugged, Indoor/Outdoor, Battery-powered asset tracking device and Bluetooth® Gateway.

Features cloud-based location solving for over 10+ years of battery life.



Indoor/Outdoor

GNSS, Wi-Fi AP MAC Address Scanning, and Cell Tower location for seamless indoor/outdoor asset management



Bluetooth® 5.2

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



'Deploy Once' Battery Life

Over 10+ years battery life on only 3 x AA 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

Ultra-rugged and weatherproof IP68, IK07 Housing



Mechanics / Design

Dimensions	Housing - 108 x 86 x 30 mm
Weight	194g
Housing	Ultra-Rugged
IP/IK Rating	Ultra-rugged and waterproof IP68 and IK07-rated housing ensures the Oyster Edge 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 silver screws supplied.
Operating Temperature	-30°C to +60°C - For operation in extreme temperatures use Lithium Batteries
3-Axis Accelerometer	3-Axis Accelerometer to detect movement, high G-force events, and more
Flash Memory	Stores records if device is out of cellular coverage. Storage capacity for over 10 days of 2-minute logging.
On-Board Speed and Heading	Scanning technology used on the Oyster 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 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 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 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 retrieval
Tip Detection & Rotation Counting	Axis angle reporting, tip detection and rotation counting (planned)

Batteries

User-Replaceable Batteries	3 x AA
Battery Life	Once Daily location updates - 10+ years Movement-Based location updates - 7 years Hourly location updates - 4.5 years