

Best in class, best selling positioning

The pTag Oyster is the next generation of the best-selling rugged GPS asset trackers. It offers up to 10 years of battery life on three user-replaceable AA batteries. Designed for extreme conditions, it operates with off-the-shelf Lithium or Lithium Thionyl Chloride (LTC) batteries.

With a Bluetooth® 5.2 gateway and Wi-Fi scanning, this device can position your equipment indoors and outdoors and supports adding sensors and other Bluetooth equipment.

The device tracks assets on the move and enters sleep mode when stationary to save power. It features 'Battery Low' and 'Battery Critical' alerts for easy maintenance.

Its IP68-rated housing is weatherproof and highly durable. 4G connectivity ensures reliable tracking.

KEY FEATURES AND BENEFITS

High Precision

GPS, GLONASS, Galileo positioning systems are used simultaneously for enhanced accuracy and faster fixes.

Rugged & Weatherproof

Ultra-rugged and waterproof IP68 and IK07-rated housing ensures the Oyster can withstand impact, fine dust, and brief submersion.

Off-the-Shelf Batteries

Powered by 3 x AA Off-the-Shelf Lithium or Lithium Thionyl Chloride (LTC) batteries for enhanced temperature operation (–30 to +60°C).

Battery Life Monitoring

Built-in 'Battery Low' and 'Battery Critical' alerts.

Wire-Free 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 supplied.

Flexible Configuration

Configure device parameters such as heartbeat rate, movement and accelerometer settings, and more to fit any tracking application.

Periodic or Movement-Based

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.



OYSTER HARDWARE FEATURES

- Movement, impact, rotation, and tip detection.
- Bluetooth® 5.2 gateway and Wi-Fi scanning.
- <2 m GPS accuracy and 4G connectivity.
- Up to 10 years battery life
- Rugged design. IP68.
- Easy battery replacement.
- Bluetooth.
- In- and outdoor positioning.

Impact Detection

Configure impact-detection alerts when g-forces are exceeded by a user-defined threshold.

Run Hour Monitoring

Capture run hours based on movement to understand and optimize asset utilization.

Tip Detection & Rotation Counting

Axis angle reporting, tip detection and rotation counting.

Theft Recovery

Switch to Recovery Mode in the case of theft or loss to activate real-time tracking for asset retrieval.

Technical specifications

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

LOCATION

GNSS Module: Sony CXD5605

Constellation: Concurrent GPS, GLONASS, Galileo, QZSS

Tracking Sensitivity: -147 dBm cold start / -161 dBm hot start

***Location Accuracy:** ~1m 2D RMS, GPS, -130dBm

GNSS Assistance: GNSS almanac and ephemeris 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 location fallback for positioning when GPS can't get a fix

* Positioning accuracy specifications are provided by the GNSS supplier and reflect ideal conditions. Device configuration, installation, environmental conditions, augmentation services, and many other factors may lead to variations in positioning accuracy.

POWER

Input Voltage: 3.8 V – 16 V DC

Sleep Current: <10uA*

Safety: Reverse Polarity Protection

*Average current in lowest power configuration

BATTERIES

User-Replaceable Batteries: 3 x AA. Batteries not included.

Supported Battery Types: Lithium (LiFeS2) or Lithium Thionyl Chloride (LTC)

***Battery Life Estimates:** Once Daily location updates – 10 years

****Movement-Based location updates – 6 years**

Hourly location updates – 3.5 years

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

** Movement-based estimates are based on 2 hours of movement, occurring 5 days a week, with default 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.

DESIGN

Dimensions: 108 x 86 x 30 mm

Weight: 173g

IP/IK Rating: Ultra-rugged and waterproof IP68 and IK07-rated housing ensures the Oyster3 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.

Operating Temperature: -30°C to +60°C - For operation in extreme temperatures use LTC Batteries.

Cellular Antenna: Internal

GPS 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 4 weeks of continuous 2-minute logging.

Onboard Speed and Heading: Current speed and heading is reported with each position update

Onboard Temperature: The device reports internal temperature which provides an indication of ambient temperature but may not always be precise.

WARRANTY

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

DON'T MISS THE OPPORTUNITY

Book a meeting with a Postrack expert today, and we'll help you try Postrack risk-free.

Visit postrackeurope.com today!