



EROAD

EROAD ETrack Oyster3

Compact device with exceptional battery life



A rugged GPS tracking device, the Oyster3 has been designed for monitoring non-powered assets where long battery life is required, without sacrificing the frequency of updates and performance. Its low power design means that 3 AA batteries can power the device for up to 10+ years. Compact in size and concealable, the Oyster3 fits seamlessly onto your equipment to help reduce outside tampering.

KEY FEATURES

- Battery life - up to 10+ years at one ping per day
- Instant theft alerts - receive instant movement alerts on MyEROAD
- No wires to connect - quickly and easily install the Oyster3 on any asset
- High-precision GPS/GLONASS tracking device
- Tracks assets when they're on the move and enters sleep mode when stationary to save power
- Weatherproof and rugged IP65 housing - Oyster 3 can be mounted on assets that are exposed to rain, dust

IDEAL FOR

- Trailers
- Agriculture equipment & implements
- Containers
- Pumps/generators/hire equipment
- Skip bins
- Other non-powered assets





TECHNICAL SPECIFICATIONS

Connectivity

The Oyster3 is available in LTE-M/NB-IoT

LTE-M / NB-IoT
(supports roaming between networks – roaming SIM required)

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

Batteries

User-Replaceable Batteries 3 x AA

Supported Battery Types

- *Lithium (LiFeS2)
- *Lithium Thionyl Chloride (LTC)
- *Lithium or LTC recommended for best performance. Please dispose of Lithium batteries in a safe and responsible manner.

Battery Life

- Once Daily location updates – 10+ years
- Movement-Based location updates – 7 years
- Hourly location updates – 3.5 years

Location

GNSS Module Sony CXD5605

Constellation Concurrent GPS, GLONASS, Galileo, QZSS

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

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

Power

Input Voltage 3.8-16V DC

Sleep Current <10uA*
*Average current in lowest power configuration

Safety Reverse Polarity Protection

Mechanics / design

Dimensions 108 x 86 x 31 mm (4.25 x 3.39 x 1.22")

Weight 173g

Housing Ultra-Rugged IP65 Housing

IP Rating IP65 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. 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 1 month of continuous 30-second logging.

On-Board Speed and Heading Current speed and heading is reported with each position update

On-Board Temperature The device reports internal temperature which provides an indication of ambient temperature but may not always be precise

About EROAD

EROAD develops technology solutions (products and services) that manage vehicle fleets, support regulatory compliance, improve driver safety and reduce the costs associated with driving. EROAD also provides valuable insights and data analytics to universities, government agencies and others who research, trial and evaluate future transport networks. This data enables those who use the roads to influence the design, management and funding of future transport networks.

See www.eroad.co.nz/products, or call **0800 4 EROAD** for more information.



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
Impact Detection	Configure impact-detection alerts when G-forces are exceeded by a user-defined threshold
Intelligent Power Management	Early registration abort saves power when out of cellular coverage
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 optimise asset utilisation
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)
Device management	
Flexible Configuration	Configure device parameters such as position update rate, movement and accelerometer settings, and more to fit any tracking application
Device Management Platform	Manage, monitor, configure, debug, update, and restart devices remotely from MyEROAD

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	Manufacturer's Warranty

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