

# Oyster Sigfox

Battery-Powered GPS LPWAN tracking on Sigfox network



enabled by  sigfox



## APPLICATIONS



Vehicle and  
fleet  
tracking



Non-  
powered  
asset  
tracking



Equipment  
locate and  
recovery



Trailers and  
mobile  
assets



Shipping  
containers  
and freight



Anchoring  
and security  
of assets

The Oyster is a rugged, waterproof, GPS tracking device designed for tracking non-powered assets where super-long battery life is required on the low cost Sigfox network.

## FEATURES

- Up to 5 years once daily location
- Up to 2 years detailed tracking
- IP67 water and dust proof
- Rugged, robust and low profile
- No install required, simply "place 'n trace"
- Off-the-shelf, user replaceable AA batteries
- Switch from "locate" to "track" over-the-air
- Battery status and low battery alert
- Integrated accelerometer
- Unauthorised movement alert

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## MECHANICAL FEATURES

Low-profile IP67 rugged housing	The IP67 rated housing is made of sturdy ABS/Polycarbonate plastic to survive bumps and knocks and is UV stabilised to survive many years in the sun and weather. Its low-profile makes it easier to mount in the corrugation on containers or to conceal on the underside of a trailer.
Operating temperature	-20°C to +60°C The device will operate in temperatures outside this range but battery life will be reduced
Dimensions (mm)	L 115 x W 65 x H 20
Weight	250 grams including batteries

## CONNECTIVITY

Network	Sigfox (LPWAN)
Configuration	USB cable and O.T.A
Sigfox Regions	RCZ1, RCZ2, and RCZ4
Sigfox Certification	Sigfox Ready, Class 0 (best performance class)

## GPS TRACKING

GPS Module	High sensitivity assisted GPS receiver, 72 channel
GPS/GLONASS	Concurrent GPS/GLONASS
Antenna with LNA	Boosted by low-noise amplifier (LNA) allows operation in "urban canyons" and container stacks

## SPECIFICATIONS

Sleep Current	5µA (micro-amps)
Batteries	3 x AA Size 1.5V batteries – alkaline or lithium. Alkaline – industrial type recommended. 1.5V Lithium – longer life and wider temperature range
Recovery Mode	Switch from Daily Locate to Live Tracking over-the-air
3D Accelerometer	The 3 axis accelerometer allows the Oyster to "sleep" in an ultra-low power state yet still wake up when movement occurs
Adaptive Tracking	Adaptive-Tracking technology enables the accelerometer and GPS data to be used intelligently to work out if it is moving and to send frequent updates, as well as to scale the update rate down to once per day if the asset is stationary in order to preserve battery life
Autonomous Aiding Data	Predicts satellite locations Reduces the time to first fix Improves performance in "urban canyons"

Sigfox is new radio technology that allows devices to transmit small messages over long range using low power.

Sigfox is rolling out a global network and provides a more competitively priced option for devices to connect to the Internet of Things (IoT).

Digital matter is developing a range of IoT devices that will operate on the Sigfox network.