



## FISHVUE LIME - Environmental Monitoring Data-logger

Persistent Data Collection for Aquatic Ecosystems

### Product Overview

FishVue LIME (Lite Integrated Monitoring Equipment) is a compact, rugged, and versatile environmental data logger designed for long-term monitoring of coastal and inland water bodies. With GPS, global cellular connectivity and flexible sensor interfaces, LIME offers a robust solution for researchers, regulators, and environmental managers seeking reliable, real-time insights into aquatic environments—whether for ecosystem health, water quality, or habitat monitoring.

### Product Features

- **Compact and Easy to Deploy:** At 180mm x 119mm x 39mm, LIME is ideal for installations in tight or remote locations - on docks, buoys, pilings, small research vessels, or remote field stations.
- **Flexible Sensor Integration:** Supports ultra-wide range of environmental sensor types including RS232, RS485, SDI-12, 1-Wire, Analog and Digital Inputs and more.
- **Real-time Global Communication:** Operates on LTE-M (Cat-M1) and NB-IoT networks, with optional external cellular antenna support for remote deployments.
- **Persistent Environmental Monitoring:** Ideal for extended remote deployments supporting trend analysis, regulatory compliance, and climate impact studies.
- **Rugged and Weatherproof:** Ultra-rugged IP68 and IK08-rated housings resist impact, dust, and water ingress with GORE® vents for pressure equalization.
- **Flexible Power Options:** Includes internal 3500mAh LiPo battery, optional solar input for seasonal or fully autonomous deployments.



## Applications

- Buoy-based, pier-mounted or benthic sensor networks for marine monitoring
- Estuarine and riparian ecosystem health monitoring and forecasting
- Persistent construction monitoring and real-time alerting
- Wide ranging inputs including turbidity, DO2, pH, salinity, temperature and more
- Automated seasonal and baseline dataset collection
- Catchment-based flood or pollution early warning systems

## General

<b>Physical Dimensions:</b>	180mm x 119mm x 39mm
<b>Operating Temperature:</b>	30°C to +60°C
<b>Storage:</b>	Months of logs with on-board flash memory
<b>Battery:</b>	3500mAh battery with optional 20Ah solar pack
<b>Power Input:</b>	6-28V DC

## Environmental Sensing and Location

<b>GPS:</b>	~3m CEP with Nordic nRF9160 internal GPS
<b>GNSS Assistance:</b>	Predicted ephemeris data for enhanced sensitivity and accuracy
<b>Accelerometer:</b>	3-Axis accelerometer for tamper detection and movement sensing
<b>Temperature:</b>	On-board ambient temperature reporting

## Enclosure Options

<b>Material:</b>	Nylon glass - IP68 and IK08
<b>Mounting:</b>	Multiple options for buoy and pole-based mounting

## Device Management and Security

- Remote configuration and diagnostics via OTA
- Data Integration: Integrates natively into Archipelago's Fleet tool for rapid visualization, and Environmental Parameters database for ongoing analysis and monitoring intelligence.
- AES-256 encryption for secure data transmission

## Why Choose LIME?

LIME delivers professional-grade environmental data collection in a package designed for real-world aquatic deployments. Whether monitoring a remote wetland, a busy harbor, or a seasonal stream, LIME delivers actionable data wherever you need it most.

## Connectivity

<b>Cellular:</b>	LTE-M (Cat-M1) and NB-IoT
<b>Wireless:</b>	Bluetooth 5.2
<b>SIM:</b>	Global SIM for multi region deployment
<b>Antennas:</b>	Internal GPS and cellular Optional External

## Interfaces and Integration

<b>Digital Inputs:</b>	Up to 5 configurable (0-40V DC, pulse counting supported)
<b>Analog Inputs:</b>	Multiple 0-30V inputs (up to 4)
<b>Digital Inputs:</b>	Switched ground (1A current limit)
<b>Protocols:</b>	SDI-12, RS232, RS485, TTL, 1-Wire, I <sup>2</sup> C
<b>Switched Power:</b>	3.3V, 5V or 12V
<b>Task Management:</b>	On-board processing for rule-based data capture