



UnifAI Water Quality Monitoring

The world's first commercially available real-time, multi-parameter water sensing capability powered by artificial intelligence (AI).

Artificial Intelligence (AI)

UnifAI Technology exists to simplify artificial intelligence for real-world applications.

Our Artificial Neural Network is trained with millions of historic water quality data points. This enables us to start with a small number of sensor parameters and accurately measure a very wide range of additional parameters, including harmful bacteria.

Low-Cost, Turnkey Sensing Solution

By using sensors from partners which measure a small number of initial parameters, we are able to keep the total cost for our solution exceptionally low.

We provide a turnkey solution that includes certified, off-the-shelf sensor heads, with a bundled wireless communication device and includes our AI, data platform and dashboard. This is deployed and priced on a "per sensor" basis (see below).

Simple Deployment, Plug and Play

To simplify deployment, our solution uses sensors with integrated batteries and SigFox wireless communications (with NB-IoT planned).

This enables a plug and play, fit and forget solution.



Dashboard with data logger, real-time alerts and secure, multi-user access

Pricing

All prices are "per sensor." Price per sensor includes as a bundle:

- Sensor/probe with integrated wireless communications
- Subscription to UnifAI AI, data platform and dashboard



In-line for Infrastructure



Buoys for Swimming Pools, Open Water & Tanks

Territory	Annual Plan		3 Year Plan	
	Sensor with first year's subscription	Annual subscription thereafter	Sensor with 3-year subscription	(Saving over 3 years)
UK	£700	£450	£1450	£150
Europe	€800	€500	€1600	€200
USA and ROW	\$900	\$550	\$1750	\$250

* Includes shipping and two-year hardware warranty
 Excludes local sales taxes
 Minimum order may apply depending on territory
 Enterprise plans are available for larger scale deployments

Note:
 Published prices are for our SigFox sensor variant, and require SigFox coverage in the location the sensors are to be deployed.
 If SigFox coverage is not available, please speak to your UnifAI agent or supplier.

Available Parameters

Water Quality Index
Electrical Conductivity
Temperature
pH
Salinity
Total Alkalinity
Carbonate Alkalinity
Calcium Hardness
Total Hardness
Total Dissolved Solids
Specific Gravity
Nitrogen
Sodium
Chloride
Hydrogen
Phosphor
Phosphate
Organic Carbon
Nitrite
Nitrate
Oxygen Chemical Depletion
Lead
ORP
Free Available Chlorine
Cyanuric Acid
Hypochlorous Acid
Hypochlorous Ion
Langelier Saturation Index (swimming pools)
Remote Battery Monitoring

Outputs and Alerts

<i>Heterotrophic Bacteria</i> Risk Alert
<i>Escherichia Coli (E.Coli)</i> Risk Alert
<i>Legionella</i> Risk Alert
Assists with predicting risk of Eutrophication Events
Assists with predicting risk of Biofilm build up

- UnifAI Water Quality Sensing uses easy to deploy, inexpensive sensors which start by measuring a small number of key parameters
- We then use Deep Learning to understand a wider range of physical, chemical and biological parameters in water (see the table on the left)
- Just connect the sensors, and access real-time alerts and visuals for multiple parameters
- This includes understanding the microbiome of water in near real-time, a critical capability enabling us to monitor the presence of microbes and nutrients in water
- As a result, we can understand and help to predict:
 - Eutrophication events (from sewage, fertilisers and industrial discharges) which can be harmful for aquatic ecosystems
 - Biofilm growth conditions in pipework
 - Biological signatures consistent with the presence of *Legionella*, *E.Coli*, and other faecal coliforms and non-faecal microorganisms
- The UnifAI solution provides a real-time early warning system for changes which can impact water quality
 - Immediate alerts for changes or events, instead of waiting for lab results
 - Monitors dynamic water quality, including changes over day/night cycle
 - Enables quick and preventative interventions, reducing long term costs and harm
- The user interface is a web application. There is no software to install. It requires no special hardware and no integration with your existing IT systems. Data and alerts are available via mobile device, laptop or PC
- Many existing deployed sensor networks and pre-existing databases are likely be compatible with our neural network models, enabling you to get more out of your current infrastructure
- All hardware purchased through UnifAI or our approved partners comes with a two-year warranty
- AI-backed sensing is not designed to replace mandatory laboratory testing, but to provide a continuous, real-time early warning system