

The real-time
nitrate *and* nitrite
monitoring solution for
drinking water producers
from source - to treatment
plant - to tap

Aquamonitrix® is a revolutionary new breed of real-time nitrate and nitrite analyser.

It is capable of selectively analysing nitrate and nitrite in the same sample, with high accuracy (~99% in freshwater) down to very low levels of detection.

Use Aquamonitrix® at the treatment plant to determine the need for blending or nitrate-removal in raw water entering the plant - and for real-time statutory-limit monitoring of nitrate *and* nitrite in treated water leaving the plant.

Aquamonitrix® delivers the same high performance for mobile and 'off-grid' battery-powered nitrate and nitrite monitoring in river basins and groundwater studies, and it provides a uniquely effective tool to identify nitrification hot spots in chloraminated drinking-water distribution systems.

Aquamonitrix® enables you to:

- Be alerted instantaneously to elevated nitrate and/or nitrite in raw water entering the plant or in treated drinking water leaving the process.
- Monitor nitrate and nitrite levels in observation boreholes and groundwater sources.
- Perform catchment/watershed studies of nitrate sources and evaluate mitigation strategies.
- Monitor nitrate and nitrite formation in the distribution system, where chloramination is used for secondary disinfection.

Aquamonitrix® is a new type of nitrate and nitrite analyser

- Based on rapid ion chromatography and a novel, proprietary UV-LED-based detection technology
- Offering laboratory accuracy in the field and real-time measurement
- With instant alarm alerts and real-time data transmission to your control infrastructure or data management system





With **best-in-class accuracy**
Aquamonitrix®
 offers a host of **additional user benefits**

Aquamonitrix® provides equivalent nitrate measurement accuracy (or better) in head-to-head trials with marketing-leading analysers for the drinking water sector.

But with Aquamonitrix® you also benefit from

- A simultaneous nitrite measurement - also with laboratory-quality accuracy (~99% in freshwater)
- Low-cost, vendor-neutral servicing
- High performance outside a treatment plant or kiosk - in water distribution networks and groundwater / river-basin water-abstraction-source environments
- Battery/solar option for mobile & remote monitoring
- Stable calibration - no need to recalibrate when moved to a different matrix type

Virtually plug n' play for instant deployment

On arriving on site, your Aquamonitrix® unit can be installed and operating in little over an hour.

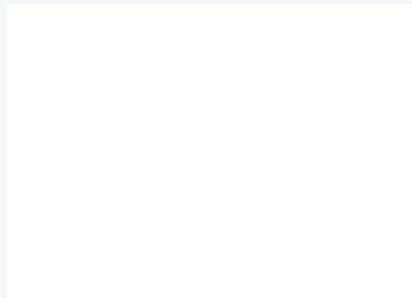
- No need for site preparation
- The analyser is lightweight and portable
- The only connections required are sample inlet and outlet
- Choose from the mains powered or the solar/battery version, with data communication options to suit your site

Low life-time costs

- No nitrite/nitrate sampling and lab analysis costs
- Low skills requirements, with simple setup and minimal intervention operation
- Equally simple servicing, which can be carried out in-house or by a local vendor-neutral service company
- Low-cost, non hazardous (NaCl) eluent

Datamonitrix
Data management portal

- Aquamonitrix® transmits your nitrate and nitrite readings by IoT and/or wired data transmission in real time
- Data input can be to SCADA and/or your choice of water/environmental data management system
- The proprietary Datamonitrix portal allows you to store, manage and trend your data, set limits and alarms, and receive analyser self-diagnosis reports - all from your PC



Want to know more?

Call us on +353 59 9149097
 Email us at info@aquamonitrix.com
 Visit www.aquamonitrix.com



TECHNICAL DATA SHEET

Specifications

- + Analyser technology: Ion chromatography and UV-LED
- + Maximum sampling frequency: 10 mins
- + Accuracy:
 - Fresh water ~99%
 - Wastewater & Saline Water ~95%
- + Precision 95%
- + Analytical Range for Fresh Water and Wastewater*
 - Nitrate: 0.6 – 500 mg/L NO₃⁻ (0.14 to 113 mg/L as N)
 - Nitrite: 0.05 – 100 mg/L NO₂⁻ (0.01 to 23 mg/L as N)

**In 35 ppt saline water, the lower limits of detection are 1.0 mg/L nitrate as NO₃⁻ (0.23 mg/L as N) and 0.5 mg/L nitrite as NO₂⁻ (0.15 mg/L as N)*

Dimensions and Features

- + External size: 23cm X 36cm X 57cm (enclosure size, without supporting cradle)
- + Weight: 12 kg
- + Portable
- + Integrated provision for mounting/securing to a fixed surface (e.g. floor, wall, etc.)
- + Integrated carry handle and lockable hinged door
- + Rugged construction: Impact, UV and corrosion-resistant
- + Eluent: Sodium Chloride (NaCl)
- + Alarms and indicators: Tri-colour Status LED

Power Source

- + 15 - 25 V dc input power, 50W max. rated power
- + Integrated battery for backup
- + Solar/battery version available for mobile and off-grid use

User Interfaces/Data Output

- + Wired output transmission: MODBUS over Serial (RS232 / RS485)
- + IoT communication capability
- + Optional IoT Datamonitrix data management platform
- + Data communications via RS232, for commissioning/troubleshooting

Environmental

- + Operating temperature range: 10 - 40°C
- + Sample temperature range: 2 - 50°C
- + Operating humidity range: 10 - 90% RH, non-condensing
- + Storage temperature range: -20 - 60°C
- + Storage humidity range: 10 - 90% RH, non-condensing
- + IP rating: IP65 (IEC 60529)

Certifications

- + C.E. Mark, REACH

Warranty

- + One Year

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