



The **real-time nitrate & nitrite monitoring solution** drinking water producers have been waiting for

Aquamonitrix® is a revolutionary new type of *in situ* real-time nitrate and nitrite analyser.

It is capable of selectively analysing nitrate and nitrite from the same sample, with high accuracy (~ 99% in fresh water) at very low levels of detection.

Aquamonitrix® can be used in a fixed position - for treatment process monitoring - or as a portable analyser for catchment, borehole and water distribution system monitoring.

Low-intervention operation, ease of use and low requirements for technical skills add up to low opex costs and affordable high-frequency monitoring.

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 monitoring sensor

- Based on rapid ion chromatography and a novel, proprietary optical 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 telemetry system



Aquamonitrix® offers high accuracy and stability, portability & affordable lifetime costs

When we say it's user friendly, we mean it

Avoid the long wait-time and cost of high-frequency 'grab and lab' samples. Forget about the problems that beset many conventional nitrate and nitrite sensors.

With Aquamonitrix® you will benefit from

- Simultaneous, yet selective, nitrate and nitrite readings, with instant data transmission
- High accuracy (~99% in fresh water)
- Stable calibration - even when the analyser is moved to a new location or sample matrix
- Truly portable - for monitoring wherever needed
- Long intervals between services, with low intervention. All that is needed is to simply top up the reagent and empty the waste sample as required, depending on sampling frequency.

Plug n' play for instant deployment

On arriving on site, your Aquamonitrix® unit can be installed and operating in a matter of hours.

- 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
- Simple setup and operation
- Equally simple servicing, which can be carried out in-house or by a local agnostic service company
- Low skills requirement and low reagent costs

Aquamonitrix® key performance parameters

- Minimum sampling interval: 15 minutes
- Lab quality accuracy and precision
- Data fed instantaneously to your plant controls – and/or the proprietary Datamonitrix data management platform for real-time results, configurable alarms, instant alerts and analyser self-diagnosis - all direct to your PC



Want to know more?

Call us on +44 1524 884972 (UK)
 +353 59 9149097 (Ireland and Europe)
 Email us at info@aquamonitrix.com
 Visit www.aquamonitrix.com



TECHNICAL DATA SHEET

Specification

- + Analyser technology: Ion chromatography and optical detection
- + Minimum sampling interval: 15 mins
- + Accuracy: ~ (fresh water) > 90% (septic wastewater)
- + Precision 95%
- + Analytical Range*
 - Nitrate: 0.6 - 500 mg/L NO_3^- (0.14 to 113mg/L as N)
 - Nitrite 0.05 - 100 mg/L NO_2^- (0.01 to 23 mg/L as N)

**We can supply custom ranges within these broad limits by adjusting the sample loop to suit your analytical needs*

Power Source

- + 15 - 25 V dc input power, 50W max. rated power
- + Battery-powered option in development
- + Integrated battery for backup
- + Solar/battery version also available

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)

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
- + Reagent: Potassium hydroxide (KOH)
- + Alarms and indicators: Tri-colour Status LED

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

Certifications

- + C.E. Mark, REACH

Warranty

- + One Year

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