



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

Your mission

To deliver clean and affordable drinking water, containing less than 50 mg/l nitrate and 0.5mg/l nitrite, to the customer's tap

Our solution

What if you could avoid or defer the high capital-cost, of energy-intensive nitrate removal processes and water blending?

Aquamonitrix® provides real-time nitrate and nitrite monitoring, enabling you to:

- React instantaneously to spike nitrate levels in abstraction sources.
- Perform upstream catchment investigations of the source of nitrate pollution – and evaluate mitigation strategies
- Monitor nitrite formation in distribution pipes
- Support the move to smart, digital water networks

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 centralised control infrastructure



The US EPA has found Aquamonitrix® to be over 90% accurate over a 30-day deployment period

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

Everything about Aquamonitrix® has been designed with you – the user – in mind. 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.

- Aquamonitrix® is easy to set up and operate.
- It can be deployed for over 600 sampling runs before servicing, to discharge the waste sample and refill the reagent cartridge.
- That is equivalent to a deployment period of over 3 months, based on a monitoring regime of 6 samples per day.
- No recalibration is required until the end of the deployment period.

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 only connections required are power and sample inlet and outlet
- The device is portable, lightweight and smaller than an airline carry-on case

Low life-time costs

- No nitrite/nitrate sampling and lab analysis costs
- No requirement for skilled technicians
- Stable calibration - and straight-forward servicing - in-house or by an agnostic service company
- Reduced reagent requirements

Aquamonitrix® key performance parameters

- Minimum sampling interval: 15 minutes
- Lab quality accuracy and precision
- Data fed directly into your SCADA system – or to your secure Datamonitrix data management platform for configurable alarms and instant alerts, direct to your PC



Want to know more?

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TECHNICAL DATA SHEET

Specification

- + Sensory Type: Ion chromatography and optical detection
- + Minimum sampling interval: 15 mins
- + Accuracy: > 90%
- + Precision 95%
- + Analytical Range*
 - Nitrate up to 500 ppm as NO₃ (113 ppm as N)
 - Nitrite up to 100 ppm as NO₂ (31 ppm as N)
- + Limits of Detection*
 - Nitrate 1.5 ppm as NO₃ (0.34 ppm as N)
 - Nitrite 0.25 ppm as NO₂ (0.08 ppm as N)

*Lower/higher limits of detection and custom ranges can be provided

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

Power Source

- + 15 - 25 Vdc input power, 50W max. rated power
- + Integrated battery for backup

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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