aquamonitrix®

REAL-TIME NITRATE & NITRITE MONITORING

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

Aquamonitrix® is a revolutionary new breed of real-time analyser, 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® to monitor raw water entering the treatment plant to determine the need for blending or nitrate-removal - 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' solar/battery-powered nitrate and nitrite monitoring in river basins and groundwater studies.

In addition, it provides a uniquely effective tool to identify nitrification hot spot in drinking-water distribution systems treated with chloroamines 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 real-time data transmission to your SCADA system and/or the proprietary Datamonitrix data management system for instant alarms and alerts and analyser self-diagnosis direct to your PC

- 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.

99% Accuracy for Nitrate and Nitrite Measurement | At the Treatment Plant or for Mobile & Remote Use

aqua monitrix®

REAL-TIME NITRATE & NITRITE MONITORING

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 nitrate 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

aqua monitrix®

aqua monitrix®

REAL-TIME NITRATE & NITRITE MONITORING

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 NO_3^- (0.14 to 113 mg/L as N)
  - Nitrite: 0.05 – 100 mg/L NO_2^- (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 NO_3^- (0.23 mg/L as N) and 0.5 mg/L nitrite as NO_2^- (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

Want to know more?

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

aqua monitrix®