

Real-time information for rapid response in wastewater treatment plants

Your mission

To treat urban wastewater while achieving regulatory compliance...containing operational costs...managing the talent challenge...enhancing public trust... and moving towards smart, digitalised wastewater treatment and recovery networks.

Our solution

What if a new type of analyser could propel your journey?

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

- Remotely monitor your WWTP, with 24/7 surveillance of nitrate and nitrite effluent concentrations. Have the peace of mind that your treatment processes are performing within specification and the reassurance of knowing that you don't need to go to site
- Receive an instant alert in the event of discharge exceeding your pre-set limits, allowing for immediate corrective action to avoid ecological impacts, fines and reputational damage
- Be assured that you will always be the first to know about any unavoidable pollution events, enabling rapid response to mitigate impacts and control PR
- Gain an enhanced understanding of the treatment process dynamics and evaluate the impact of process optimisation and/or novel technologies on nitrate and nitrite concentrations in treated wastewater discharge
- Support your company's journey towards Smart Water 2.0 with digitalisation of wastewater treatment plant operation and control

Aquamonitrix® is a novel nitrate and nitrite monitoring solution for the wastewater treatment sector

- Based on rapid ion chromatography and a novel, proprietary optical detection technology
- Offering laboratory accuracy in the field and real-time measurement
- With instant data transmission to your centralised control infrastructure



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

You can forget about everything you've known before – it's that simple

Everything about Aquamonitrix® has been designed with you – the user – in mind. Forget the long wait-time and cost of high-frequency 'grab and lab' samples - and avoid the problems that beset many existing real-time nitrate and nitrite analysers.

- The technology behind Aquamonitrix® ensures no loss of accuracy in cloudy samples.
- No specialist technical skills are required for set-up or operation.
- The analyser 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 need for manual sampling and lab analysis
- Stable calibration and low reagent costs
- Simple setup and operation
- Equally simple servicing, which can be carried out in-house or by a local, agnostic service company

Aquamonitrix® key performance parameters

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



Want to know more?

Call us on +44 1524 884972 (UK)
+33 50 01 40007 (France) or +33 50 01 40008 (Germany)



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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