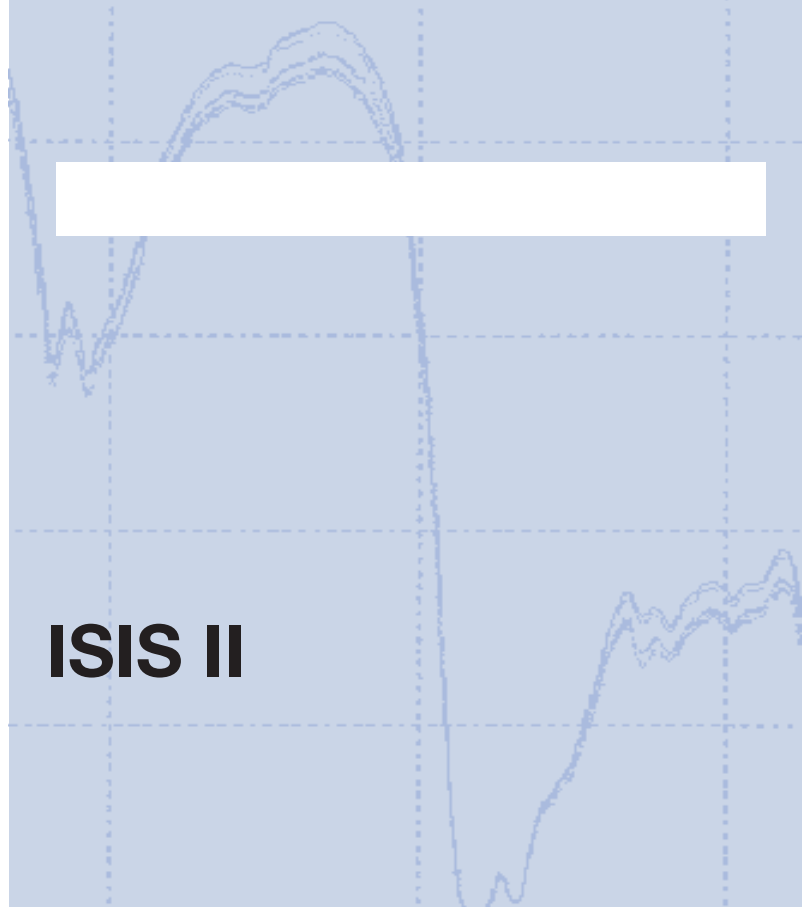


## A compact, universal spectrophotometric sensor

**ISIS II is a full-range UV-visible spectrometer probe which can be fully immersed in a tank, pipe or process stream and measures continuously, with high stability and almost no maintenance.**

Spectral information **between 200 – 710 nm** and in **the Near InfraRed region\*** is transmitted through an optical fibre to the BlueBox, where it is transformed and used to calculate the concentration of nitrate, suspended solids, organic compounds, DOC, COD, SAC and other parameters.

The probe is exceptionally easy to install and operate and offers enormous cost savings.



# ISIS II



- UV-Vis Spectrometer\*
- Spectra evaluation from 200 - 710 nm and in the Near InfraRed range\*
- Continuous direct measurement in a process stream, pipe or canal
- Almost maintenance free
- Compact design
- Simple installation
- Extremely cost effective
- Very user friendly

\* (extended Near InfraRed range available soon)

# ISIS II (In-line Spectroscopic Immersion Sensor)

## For general spectral measurements in most types of sample

### Area of applications

- Uses the full UV-Vis-range (200 - 710 nm).
- Using existing calibrations for standard parameters
- Creating specific calibrations by multivariate chemometrics e.g for dyes, detergents, surfactants, turbidity, suspensions, emulsions and many other types of material.
- Easy adaption to various samples with different pathlengths.

### Nitrate

For NO<sub>3</sub>/NO<sub>3</sub>-N measurements

- Range: 0.1 - 100 mg/l NO<sub>x</sub>\_eq (extendable)
- Accuracy: ± 5 % rel. of full scale\*
- 20 sec/measurement

### Solids

Turbidity derived from spectral information correlates with solids even under difficult conditions. The character of the particles is accounted for i.e. particle size, colloids, bubbles

### Organic Carbon Parameters (natural and drinking water)

- Correlation with DOC and COD in natural and waste water, drinking water, process water.

### DOC

#### (natural and drinking water)

- Range (mg/l): 0.01 - 50 (extendable to 500)
- Accuracy: ± 5 % rel. of full scale\*

### COD

- Range (mg/l): 10 - 100
- Accuracy: ± 5 % rel. of full scale\*
- 20 sec/measurement

*\* Resolution and accuracy of applications depend on the quality of the reference analytics and the stability of the water matrix.*

### Technical Data

#### Measuring principle

UV/Vis Spectra photometer via fiber in the wavelength range from 200 to 710 nm

#### Path length

0.5 mm - 20 mm

#### Measuring head

##### Weight

ca. 500 g

##### Material

Stainless steel / POM

#### Dimensions

50 mm diameter  
150 mm length

#### Operating temperature

-10 °C to 120 °C