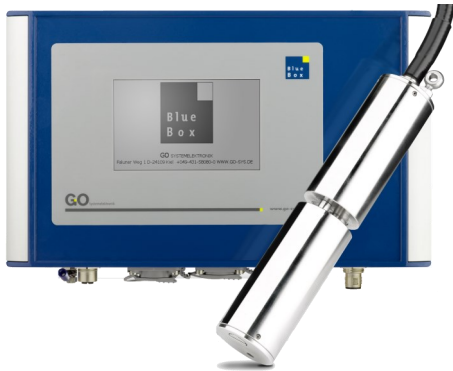# NORDITEC

Uv-Vis Spectrometer for In-Situ Analysis - ISA

Combines Chemometric Spectroscopy with Waste Water & Water Analysis

Transmitter & Cleaning compressor can be installed in a compact weatherproof housing

Features:

- Reagent free measurement
- Adjustable path length
- Integrated air clean function
- Fibre optic cable to sensor with no electronics in the sensor head
- Open Access calibration Software
- Flexible install options within different size weatherproof housings

Multi-parameters:

- COD / BOD / TOC equivalent
- Nitrate / Nitrite
- Turbidity
- Spectral Fingerprints
- Non-absorbing NH3, PO4

Applications:

- Effluent Monitoring
- River Water
- Potable Water Intakes
- Site specific calibrations
- Process Monitoring

Flexible install options for ease of deployment

NORDITEC

System Specification

Operation principle	UV-VIS spectrum 200 - 720 nm
Measuring principle	Spectral Analysis
Optical Path Length	0.5 - 20mm
Frequency of measurement	< 60 seconds
Light source	Xenon flash light
Parameters - Organics	COD / TOC / BOD equivalent ; SAC
Parameters - Non-organic	Nitrate / Nitrite / Turbidity / Non-absorbent including NH3 / PO4
Spectral	Spectral Fingerprint for water quality assessment / Toxic detection
Calibration Method	Chemometric Statistical Analysis using optional ISA plus software

Transmitter Specification

Construction	Dimensions (h x w x d)	170 x 280 x 90 mm
	Weight	2.6 kg
	Materials	Aluminium die cast housing
	Environmental	-0-40°C
	Weather Protection	IP65 std
Outputs	Display	Graphic / Colour touch panel
	Analogue:	2x 4- 20mA standard
	Digital:	2x digital standard
	Data interface:	Canbus modular connectivity
	Database:	SQL System software
Remote access	Cellular Modules:	Internet Data access
Air cleaning control	Integrated Valve:	User selectable cleaning frequency
Power Requirements	Supply:	18-36v dc
	Load:	Typical 0.7 a ; 15W

Sensor Assembly Specification

Construction	Dimensions	230mm x 44mm dimensions
	Weight	0.8 kg
	Materials	SS 316 ; Titanium option
	Environmental	-10 ^{o}C to 110 ^{o}C
	Weather protection	IP 68 ; ATEX Options
Connection	Fibre Optic Cable	5m Standard ; options to 20M
Air cleaning	External air compressor	Max 4 bar