

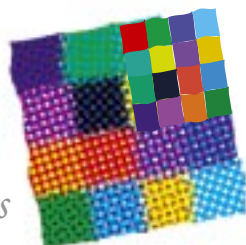


# Odysseo™

## IN SITU ANALYSIS OF COD\* AND NITRATES USING UV SPECTROSCOPY

- \*Alternative method following AFNOR X PT 90-210 and DIN 38404-C3 standards
- No reagent
- Result within 5 seconds
- No filtration
- Compact size

*datalink  
instruments*



*dtli.*

Odysséo™ is a submerged probe for nitrates and COD concentration measurement in waters. The measurement method uses UV absorption spectroscopy. It does not need reagent or sample preparation.

An imbedded computer automatically calculates the measurement result in the chosen unit:

NO<sub>3</sub>, (N)NO<sub>3</sub>, D.C.O., m<sup>-1</sup>, COT...

The body of the probe is made of 316L stainless steel for the use in rough and waste water. An automatic cleaning system can be installed on Odysséo™ to maintain the measurement capability. This cleaning system has no moving part, preventing the probe from particles or dust blocking effect.

#### MAIN APPLICATIONS IN COD

- COD measurement in sewage treatment plant
- Coagulant dosing for drinking water production
- Industrial effluent monitoring
- Rain water survey
- River monitoring stations

#### MAIN APPLICATIONS IN NITRATES

- River monitoring
- Sewage treatment plants
- Drinking water

#### VERY LOW OPERATION COST

The UV spectroscopy measuring principle requires no chemical reagent or calibration solutions resulting in very low operation and maintenance costs.

#### NO FILTRATION

As the Odysséo™ probe is directly put in water, no pumping or filtration system is required.

#### AUTOMATIC CLEANING SYSTEM

An automatic cleaning system is installed on the probe as an option. This gives Odysséo™ a complete autonomy.

#### BUILT-IN DATALOGGER

The measurements are dated and stored in a static memory with a capacity of more than 10,000 data. They can be transferred on a personal computer using a RS232 link.

#### MEASUREMENT REMOTE COMMAND

This option allows a remote command of the measurement in order to synchronize the probe with a PLC.

#### INSTALLATION

The Odysséo™ probe is proposed in two versions:

- With a hard stainless steel handling bar.
- With a mobile Stainless steel cable.

#### TRANSMITTER

A transmitter provides the probe with its energy power and the automatic cleaning system.

#### Communication:

A graphic screen displays the measurement results.

Up to four 4 – 20 mA outputs are available.

Programmable alarm relays.

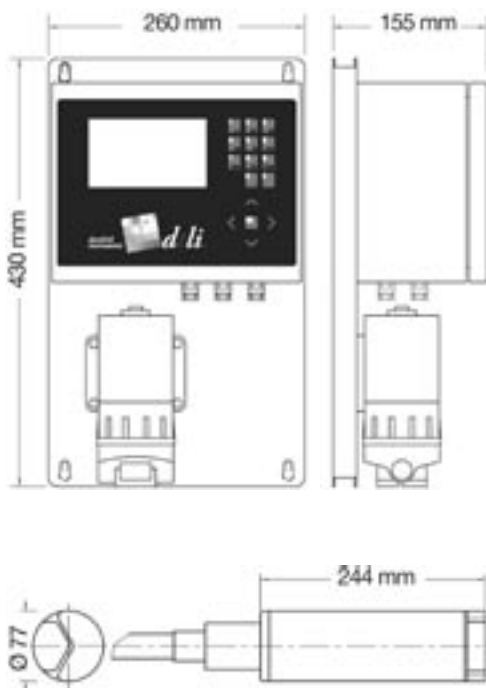
RS232 link for data reading.

#### PARAMETERS SETTING

The parameters setting is very easy using the transmitter's keyboard.

#### CABLE

The Odysséo™ probe is delivered with a standard 5 m long electrical cable.



<b>Nitrate measurement range:</b>	0 – 250 mg/L NO <sub>3</sub> , (0 – 50 mg/L N-NO <sub>3</sub> )
<b>Repeatability @ 10 mg/L:</b>	0.1 mg/L
<b>Repeatability @ 100 mg/L:</b>	0.3 mg/L
<b>Accuracy in the 0 - 100 mg/L NO<sub>3</sub> range:</b>	2%
<b>COD measurement range (unit O.D.)</b>	
<b>Low range:</b>	0 – 100 m <sup>-1</sup> (rivers, drinking water)
<b>High range:</b>	0 – 1000 m <sup>-1</sup> (industrial effluents, sewage work)
<b>Repeatability @ 10 m<sup>-1</sup>:</b>	0.1 m <sup>-1</sup> typical (low range)
<b>Repeatability @ 100 m<sup>-1</sup>:</b>	1 m <sup>-1</sup> typical (high range)
<b>Operating pressure:</b>	4 bar max (40 meters depth).
<b>Operating temperature:</b>	1°C – 60°C
<b>Outputs:</b>	4 – 20 mA insulated Alarm relays (on transmitter only)
<b>Communication:</b>	RS232 for stored measurement reading
<b>Power:</b>	
<b>Transmitter:</b>	90 – 240 VAC 50-60Hz 110W
<b>Weight:</b>	
<b>Probe:</b>	2.5 Kg
<b>Transmitter:</b>	10 Kg
<b>Standards:</b>	CE standards– EN50081-2 – EN50082-2 EN55011, DIN 38404-C3
<b>Options:</b>	UV turbidity Cleaning system with transmitter only

