

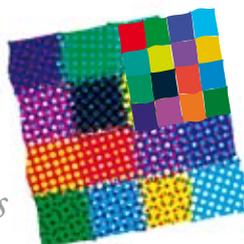


# AM200

## ON-LINE AMMONIA ANALYSER

- Unique method by UV spectroscopy
- Usable with unfiltered water
- Measurement within 1 minute
- No interference due to turbidity or water colour
- Compact size

*datalink  
instruments*



*dtli.*

On-line ammonia analysis has become essential to hold up the environmental and sanitary regulations for all kinds of water: rivers and underground water, drinking water, industrial effluent, sewage.

The unique method used in the AM200 is based on the Fourier transform of the absorption spectrum of ammonia  $\text{NH}_3$  released by the addition of a small amount of sodium hydroxide in the analysed water.

#### MAIN APPLICATIONS

- River survey
- Drinking water plants
- Industrial effluent control
- Sewage works

#### VERY LOW OPERATING COSTS

The UV spectroscopy measuring principle requires no specific chemical reagents (except low cost 10% sodium hydroxide) and no calibration solutions resulting in very low operating and maintenance costs.

#### NO FILTRATION REQUIRED

Thanks to simple and large bore tubing, turbid water with particles in suspension can be

monitored without clogging risks. As the measurement is performed with the gaseous phase, no interference can be caused by suspended solids or turbidity.

#### XENON LAMP

The xenon lamp has a lifetime of  $10^9$  flashes, equivalent to 10 years of use with one measurement every minute.

#### BUILT-IN PERISTALTIC PUMP

When the water is not pressurised (rivers, effluents, sewage), a peristaltic pump can be added to the analyser. It is synchronized with the measurements to increase the lifetime of the tubes.

#### BATTERY/MAINS POWER SUPPLY

For field measurements or isolated sites, a 12V built-in battery can make the analyser autonomous for about 100 measurements.

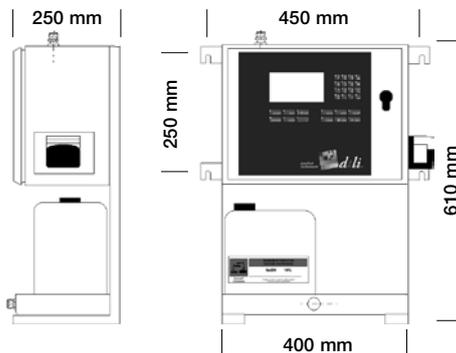
For plant applications, the battery provides total immunity against mains disturbances or power cuts, even over a long period.

#### BUILT-IN DATALOGGER

The measurements are dated and stored in a static memory with a capacity of more than 7,000 measurements. They can be transferred later via the RS232 port on a PC without specific software using Hyperterminal® of Windows®. The data are compatible with standard worksheets, particularly Excel®, to obtain graphs easily.

#### GRAPHIC DISPLAY

Measurements can be displayed on the graphic screen showing all data obtained during one hour, one day, one week, one month or one year. During the measurement cycle, a moving synoptic shows the operation sequence.



|                                   |   |
|-----------------------------------|---|
| <b>Range:</b>                     | 0 - 10 and 0 - 500 mg/l $\text{NH}_4^+$   |
| <b>Detection limit:</b>           | 0.1 mg/l $\text{NH}_4^+$  |
| <b>Repeatability at 0.5 mg/l:</b> | +/- 0.05 mg/l $\text{NH}_4^+$ typical   |
| <b>Repeatability at 10 mg/l:</b>  | +/- 0.1 mg/l $\text{NH}_4^+$ typical  |
| <b>Initial calibration:</b>       | +/- 2% typical  |
| <b>Sample input/output:</b>       | Stainless steel fitting for plastic tube external $\varnothing 12$ mm   |
| <b>Pressure:</b>                  | Maximum 2 Bar   |
| <b>Flow:</b>                      | Maximum 2 L/mn, typical 0.5 L/mn only during the measurement cycle  |
| <b>Sample temperature:</b>        | > 0°C - 30°C  |
| <b>Sodium hydroxide:</b>          | Concentration: 10%, 5 litre tank, autonomy: 5000 measurements   |
| <b>Outputs:</b>                   | 4-20 mA insulated, 12 bit resolution<br>High and low threshold relays   |
| <b>Communication:</b>             | Port 1: RS232 for PC or modem or MODBUS,<br>Port 2: RS232 for on-line printer   |
| <b>Power supply:</b>              | 110-120V / 220-240V 50/60 Hz 30VA<br>+ built-in 12V battery   |
| <b>Casing:</b>                    | Watertight IP559 -<br>Ambient temperature: > 0°C - 60°C   |
| <b>Weight:</b>                    | 20 Kg   |
| <b>Standards:</b>                 | CE Conformity - EN50081-2, EN50082-2,<br>EN55011  |
| <b>Optional:</b>                  | <ul style="list-style-type: none"> <li>■ Peristaltic sampling pump</li> <li>■ Measurement remote control</li> <li>■ Automatic cleaning system</li> <li>■ 4 channels multiplexing system</li> <li>■ Modem board</li> </ul> |

