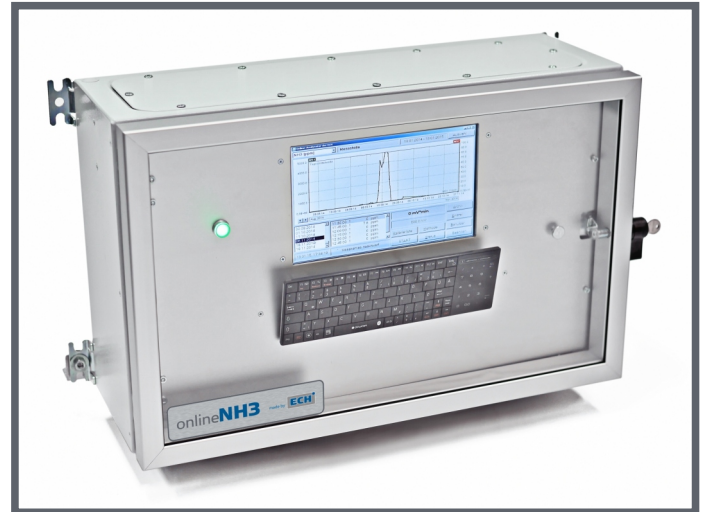


## Product description

The OnlineNH<sub>3</sub> is used for the continuous quantitative determination of ammonia gas (NH<sub>3</sub>) in gas mixtures.

The system is designed with an integrated dilution step for measurement of very high concentrations (100 - 20000 ppm). Also very low contents in the range of odour threshold (0.1 - 100 ppm) can be measured.

The OnlineNH<sub>3</sub> contains a selective amperometric sensor with gas selective membranes, membrane pumps for gas transportation and sample transfer and an integrated PC for continuous recording of measurement data, trends and alarm states. The measurement values can be transmitted via digital (alarm-) and analog outputs into the control room.



Analyzer for online determination of NH<sub>3</sub> in gases

Due to an integrated cleaning system the gas analysis in O<sub>2</sub> free gases (e. g. biogas) is realized without any drift effects. Because of the stress free mode of operation, the sensor lifetime is considerably increased.

The operation principle makes the OnlineNH<sub>3</sub> ideal as a basis for NH<sub>3</sub> adjusted regulation of enrichment and cleaning steps.

The instrument is available in the same design for monitoring of hydrogen sulphide (H<sub>2</sub>S), sulfur dioxide (SO<sub>2</sub>) or ozone (O<sub>3</sub>).

## Applications

- As basis for NH<sub>3</sub> adjusted regulations (e. g. monitoring of air quality in livestock buildings)
- Environment analysis

Fields of applications:

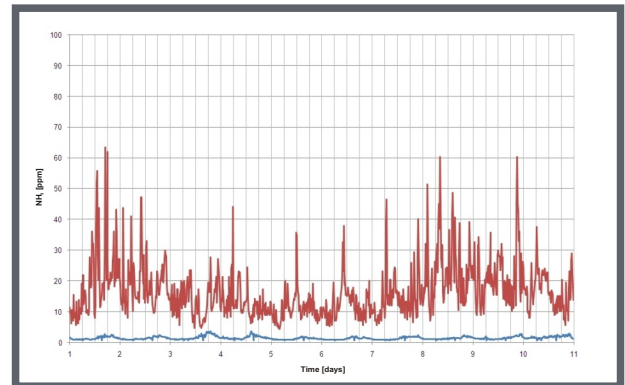
- Industrial sectors
- Animal husbandry
- Biogas plants



Biogas plant

## Advantages

- Continuous NH<sub>3</sub> determination in gases (measurement duration < 5 min)
- Robust method of analysis
- Automatic sample dosing
- Easy calibration steps
- Selective electrochemical sensor with no cross-sensitivity
- Software easy-to-use
- Output value of NH<sub>3</sub> as a 4 - 20 mA signal for integration into the local control system
- Long lifetime of the sensors due to the intermittent gas switching
- Integrated rinsing steps for measuring of continually fresh samples
- Active sample intake of the gas up to a distance of 100 m – variable setup of device (wall mounted)
- Also available for determination of hydrogen sulphide (H<sub>2</sub>S), sulphur dioxide (SO<sub>2</sub>) or ozone (O<sub>3</sub>)

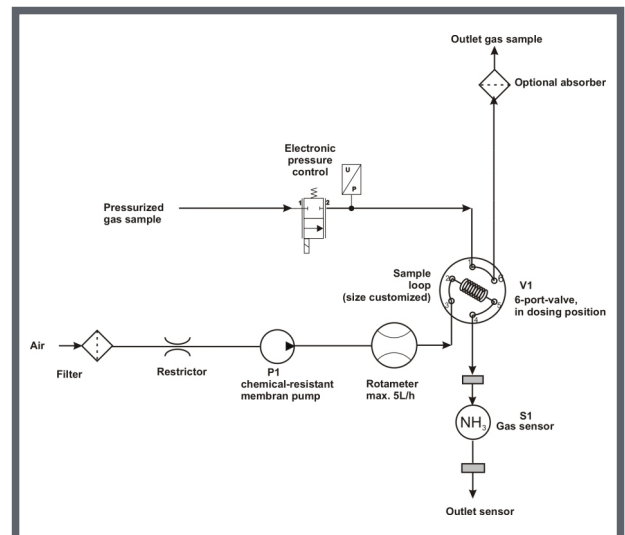


Determination of NH<sub>3</sub> at two sampling points before and after a biofilter

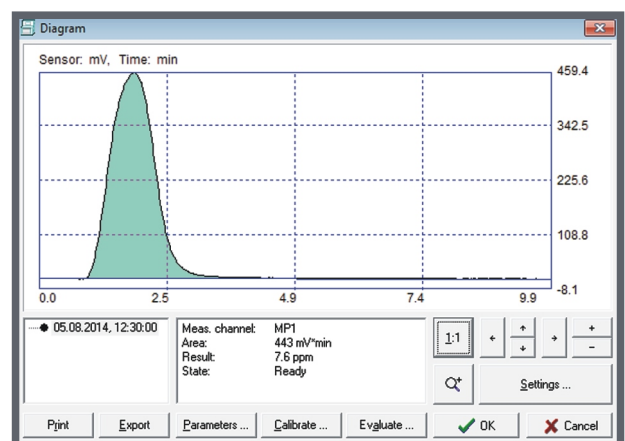
## Specifications

Sample transfer over an up to 100 m long distance

|                         |  |
|-------------------------|--|
| Measuring points:       | Max. 2                                     |
| Dosing volume:          | 0.1 - 100 mL<br>(depending on application) |
| Sample pressure:        | Ambient or pressurized                     |
| Typical measuring time: | < 5 min (depending on sample)              |
| Measuring range:        | 0.1 - 20000 ppm (2 %)                      |
| Gas supply:             | Internal pump or pressure controller       |
| Alarm:                  | Dry contact                                |
| Interface:              | 4 - 20 mA output                           |
| Power supply:           | 220 - 230 V, 50 Hz, 2 A                    |
| Power input:            | 100 W                                      |
| Protection type:        | IP66                                       |
| Dimensions:             | 660 x 250 x 400 mm (W x D x H)             |
| Weight of the device:   | 9 kg                                       |



Flowsheet of the device



Determination of NH<sub>3</sub> in gas stream

We are here for you



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