

# ECO PHYSICS CLD 844 CM hr

## Application examples



- Monitoring of process chemicals and gases
- Permanent monitoring of clean room conditions
- Control of air filter systems
- Process control such as photolithography, etching, etc.
- R&D of DeNO<sub>x</sub> devices

The CLD 844 CM hr is capable to measure and display NO, NO<sub>2</sub>, NO<sub>x</sub>, NH<sub>3</sub> and the total NO<sub>x</sub>-amines! The heated inlet minimizes chemical alterations of the sample gas.



### Two instead of one.

The CLD 844 CM hr analyzer is optimized for the measurement of N-containing compounds such as NO, NO<sub>2</sub>, NH<sub>3</sub>, NMP and amines.

The outstanding feature is the concept of two parallel reaction chambers. They guarantee simultaneous measurement of e.g. NO and NO<sub>x</sub> in order to generate the precise value of NO<sub>2</sub>.

Thanks to its two converter with different characteristics measuring NO<sub>x</sub> and the total of NO<sub>x</sub>-amines allows even to determine the NH<sub>3</sub>. The required measurement mode can be selected via the keypad at the front panel.

### A fascinating technology.

The analyzer is not only a state-of-the-art product in terms of precision and reliability. Its technological base also sets the trend for others. All components are contained in a case of only 3 HU, including vacuum pump and thermal ozone scrubber.

Naturally occurring pressure variations in the sample flow are balanced out by means of an electronic and



The CLD 844 CM hr with slides is perfectly prepared for rack mounting.

mechanical bypass system (r). This module is not required in systems with an external sample pressure regulation.

Due to the heated inlet (h) no external preconditioning is required. This minimizes chemical alterations of the sample gas, e.g. salt formation with amines reduce the measured value of NH<sub>3</sub>.



- Four freely selectable measurement ranges
- Choice between several measurement modes
- Error message coded and in full text
- Rapid system integration
- Virtually maintenance-free even in continuous operation.



### User friendliness is a top priority.

The analyzer can be operated by means of the integrated keypad or remotely from a personal computer. The clear layout of the menu structure guides the user and enables him to take advantage of all analyzer functions with simple commands.

Display of NO<sub>x</sub>-amines, and NH<sub>3</sub>

# CLD 844 CM hr

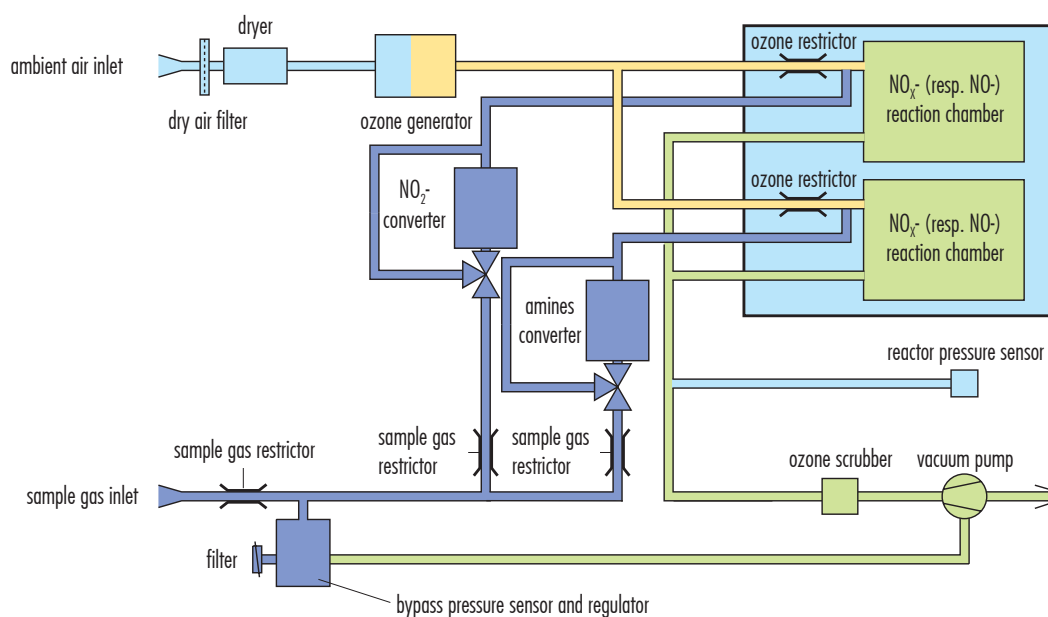
## Specifications

Measuring ranges	four freely selectable ranges from 0.5–500 ppm	Power required	400 VA (incl. membrane pump and ozone scrubber)
Min. detectable concentration	0.025 ppm*	Supply voltage	100 – 230 V / 50 – 60 Hz
Noise at zero point (1 $\sigma$ )	0.012 ppm*	Interface	RS 232
Lagtime	<1 sec	Analog output	4–20 mA into 500 $\Omega$ max.; 0–1 V; 0–10 V
Rise time (0–90%)	<1 sec	Dimensions	height: 133 mm (5 1/4 ") width: 450 mm (19 ") with moulding: 495 mm depth: 545 mm
Temperature range	5–40 °C	Weight	26 kg
Humidity tolerance	5–95% rel. h (non-condensing, ambient air and sample gas)	Delivery includes	CLD 844 CM hr analyzer, power cable, analog signal cable, manual
Quenching	for H <sub>2</sub> O: <4%/vol.-% H <sub>2</sub> O for CO <sub>2</sub> : <1%/vol.-% CO <sub>2</sub>	Standard	CLD 844 CM hr two converters for the measurement of amines and NO <sub>2</sub> , electro-mechanical pressure regulator and heated gas inlet
Sample flow rate	1.2 l/min (0.3 l/min without option r)		
Input pressure	600–1200 mbar abs. (without option r to be externally stabilized within $\pm 3$ mbar)		
Dry air use for O <sub>3</sub> generator	internally generated (no external supply gas required)		

\* depending on filter setting

ECO PHYSICS reserves the right to change these specifications without notice.

## Flow diagram



## ECO PHYSICS

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