

# ECO PHYSICS CLD 88 CY p

## Application examples



Measurement of N-containing compounds such as  $\text{NO}_x$ ,  $\text{NH}_3$  and amines

Airquality monitoring around chemical and petrochemical plants

Permanent monitoring of clean room conditions in R & D labs

**The CLD 88 CY p is capable to measure  $\text{NO}_x$ ,  $\text{NH}_3$  and the total  $\text{NO}_x$ -amines! It allows the sequential measurement of concentrations even in the range of parts per trillion!**



Clean room laboratories require reliable and precise gas analysis.

### When decimals are decisive.

The CLD 88 CY p fulfills the requirements of many research groups specializing in detecting and monitoring smallest variations of N-containing compounds such as  $\text{NO}_x$ ,  $\text{NH}_3$  and amines.

$\text{NH}_3$  measurement is accomplished by a sequential detection of  $\text{NO}_x$  and  $\text{NO}_x$ -amines. Thanks to its two converters with different characteristics measuring the  $\text{NO}_x$  and the total of  $\text{NO}_x$ -amines allows to determine the  $\text{NH}_3$ .

The pre-chamber (p) minimizes zero drift and cross sensitivity. This makes it ideally suited for areas with excellent air quality.



Display of  $\text{NO}_x$ -amines, and  $\text{NH}_3$

### User friendliness.

The development of an ECO PHYSICS analyzer always requires full user comfort. The user can easily adapt the operation according to his needs and applications by selection of predefined settings.

### Compact and modular construction.

The CLD 88 CY p is the most compact unit of its class. Thanks to the totally modular layout and the rich variety of options this analyzer is designed for a multitude of applications.

### 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. Naturally occurring pressure variations in the sample flow are balanced out by means of an electronic and mechanical bypass system (option r).

The heated inlet (option h) minimizes chemical alterations of the sample gas, e.g. salt formation with amines reduce the measured value of  $\text{NH}_3$ .

The use of first-rate components guarantees virtually service-free operation. Maintenance simply means annual replacement of filters and membranes besides the consumables required by special sampling conditions.

- Four freely selectable measurement ranges between 5 ppb and 5000 ppb
- Compact design without any additional space required
- Choice between several types and numbers of converters from 1 to 2 according to the application
- Pre-chamber to offset cross sensitivity
- Operation and control via keypad or personal computer

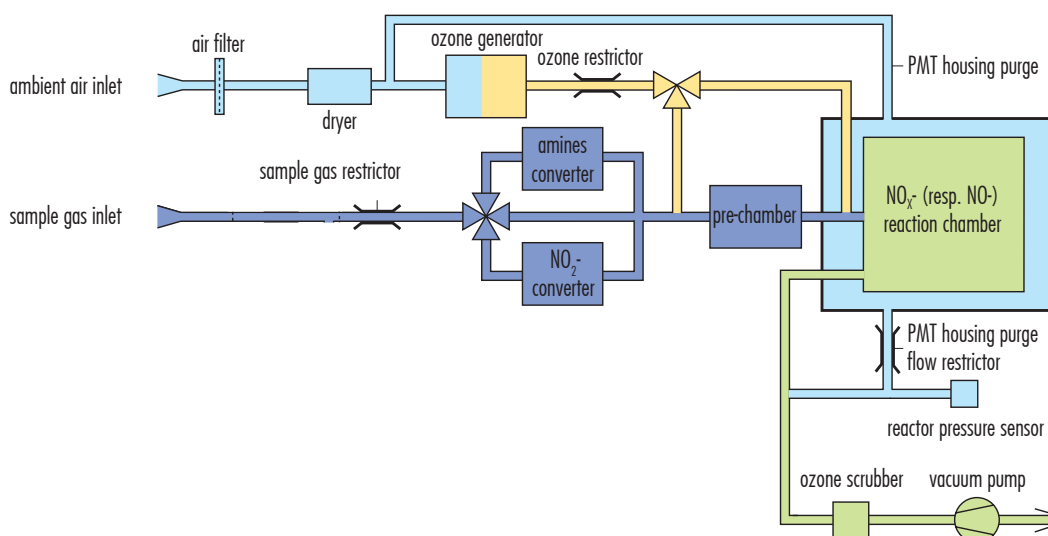


# CLD 88 CY p

## Specifications

Measuring ranges	four freely selectable ranges from 5-5000 ppb	Interface	RS 232
Min. detectable concentration	0.05 ppb*	Analog output	4 - 20 mA into 500 $\Omega$ max.; 0 - 1 V; 0 - 10 V
Noise at zero point (1 $\sigma$ )	0.025 ppb*	Dimensions	height: 133 mm (5 1/4 ") width: 450 mm (19 ") with moulding: 495 mm depth: 545 mm
Lagtime	<1 sec	Weight	24 kg
Rise time (0-90%)	<30 sec	Delivery includes	CLD 88 CY p analyzer, power cable, analog signal cable, manual
Temperature range	5 - 40 °C	Standard	CLD 88 CY p converter for amines and NO <sub>2</sub> , pre-chamber (chemical zero)
Humidity tolerance	5 - 95% rel. h (non-condensing, ambient air and sample gas)	Options	h hot tubing
Sample flow rate	0.3 l/min	* depending on filter setting	
Input pressure	to be externally stabilized within $\pm$ 3mbar	ECO PHYSICS reserves the right to change these specifications without notice.	
Dry air use for O <sub>3</sub> generator	internally generated (no external supply gas required)		
Power required	400 VA (incl. membrane pump and ozone scrubber)		
Supply voltage	90-250 V/50-60 Hz		

## Flow diagram



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