

ECO PHYSICS CLD 86 CYp

Application examples

Measurement of N-containing compounds such as NO_x , NH_3 and amines

Airquality monitoring around chemical and petrochemical plants

Permanent monitoring of clean room conditions in R & D labs



The CLD 86 CY p is capable to measure NO_x , NH_3 and the total 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 86 CY p fulfills the requirements of many research groups specializing in detecting and monitoring smallest variations of N-containing compounds such as NO_x , NH_3 and amines.

NH_3 measurement is accomplished by a sequential detection of NO_x and NO_x -amines. Thanks to its two converters with different characteristics measuring the NO_x and the total of NO_x -amines allows to determine the 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 NO_x -amines, and 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 86 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 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 50 ppb and 50000 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 86 CY p

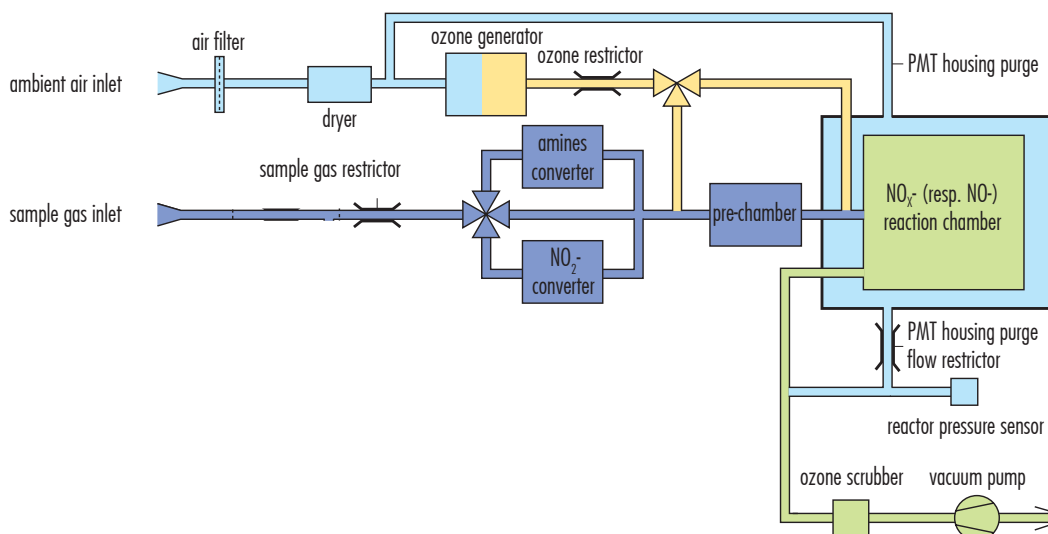
Specifications

Measuring ranges	four freely selectable ranges from 50–50000 ppb	Interface	RS 232
Min. detectable concentration	0.5 ppb*	Analog output	4 - 20 mA into 500 Ω max.; 0 - 1 V; 0 - 10 V
Noise at zero point (1 σ)	0.25 ppb*	Dimensions	height: 133 mm (5¼") 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	CLD86 CY p analyzer, power cable, analog signal cable, manual
Temperature range	5 - 40 °C	Standard	CLD86 CY p converter for amines and NO ₂ , pre-chamber (chemical zero)
Humidity tolerance	5 - 95% rel. h (non-condensing, ambient air and sample gas)	Options	h hot tubing
Sample flow rate	1.2 l/min (0.3 l/min without option r)		
Input pressure	to be externally stabilized within ±3mbar		
Dry air use for O ₃ 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		

* depending on filter setting

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

Flow diagram



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