

ECO PHYSICS CLD 88 Y p

Application examples



- Ambient monitoring in areas with excellent air quality
- Supervision of production processes in the chemical and hi-tech industries
- Permanent monitoring of clean room conditions in R & D labs
- Biomedical and pharmaceutical research
- Plant physiological research

The CLD 88 Y p nitrogen oxide analyzer is unique in its speed and precision. It allows the sequential measurement of NO and NO₂ concentrations even in the range of parts per trillion!



Monitoring of ambient air quality.

When decimals are decisive.

The CLD 88 Y p fulfills the requirements of many research groups specializing in detecting and monitoring smallest variations of NO₂ concentrations in less than thirty seconds despite its total sample flow. The lagtime of less than a second makes it even more attractive.

NO₂ measurement is accomplished by a sequential detection of NO and NO_x. The pre-chamber minimizes zero drift and cross sensitivity. This makes it ideally suited for areas with excellent air quality.

For specific measurements the Y converter can be replaced by the optionally available photolytic

converter unit PLC 860.

User friendliness.

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

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.

Unique calibration by pressing a button!

The accuracy of chemiluminescence detection is strongly dependent on the calibration of the analyzer.

In order to assure reliability of its results the CLD 88 Y p analyzer has optionally a calibration module (I) for the zero level and the NO reference gas. Calibration is quickly and automatically carried out by pressing a button on the keypad. This extremely useful feature eliminates the potential risk of erroneous calibrations.

Compact and modular construction.

The CLD 88 Y 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.

- Compact design without any additional space required
- Molybdenum converter for NO₂ detection
- Pre-chamber to offset cross sensitivity
- Four freely selectable measurement ranges
- Operation and control via keypad or personal computer
- Optional calibration module for zero level and span gas calibration



NO Range 56.32 100.0 ppb

Mass/Mode Recorder: NOx2cal NOx2
Data/Time Conn.: Timers Filter

Time for Calibration: 100 sec NOx2
NO-Cylinder: Conc. 1 100.0 ppm

Standard: 1.1/NOx2
Serial: Pressure out at Range 100.0

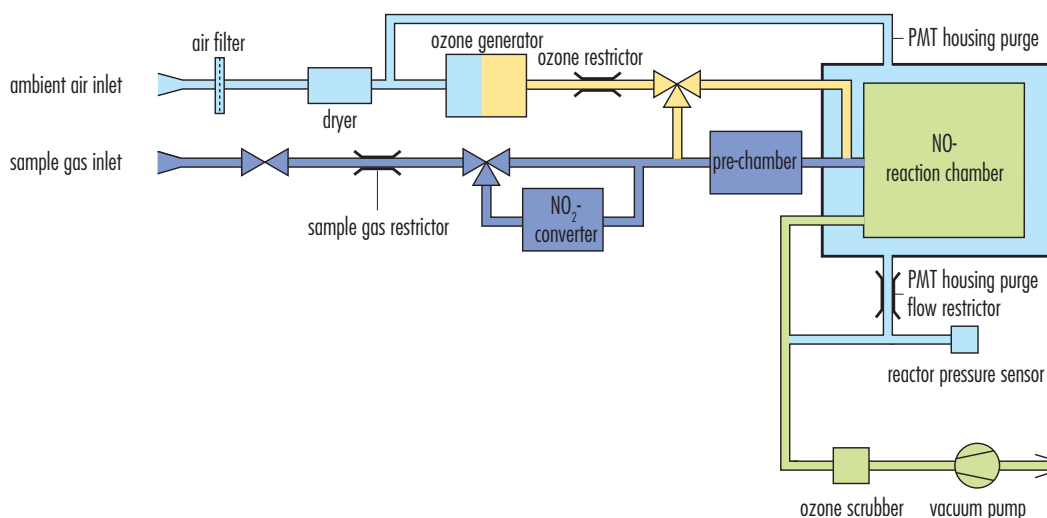
Clearly structured and full text displays inform the user about the instrument's status, any errors and measures to return to normal operation.

CLD 88 Y p

Specifications

Measuring ranges	four freely selectable ranges from 5–5000 ppb	Analog output	4–20 mA into 500 Ω max.; 0–1 V; 0–10 V
Min. detectable concentration	0.05 ppb*	Dimensions	height: 133 mm (5¼") width: 450 mm (19") with moulding: 495 mm depth: 545 mm
Noise at zero point (1 σ)	0.025 ppb*	Weight	24 kg
Lagtime	<1 sec	Delivery includes	CLD 88 Y p analyzer, power cable, analog signal cable, manual
Rise time (0–90%)	<30 sec	Standard	CLD 88 Y p molybdenum converter, pre- chamber
Temperature range	5–40 °C	Options	l automatic calibration module for zero level and span reference gas or r electro-mechanical pressure regulation
Humidity tolerance	5–95% rel. h (non-condensing, ambient air and sample gas)	* depending on filter setting	
Sample flow rate	0.3 l/min (1.2 l/min with option r)	ECO PHYSICS reserves the right to change these specifications without notice.	
Input pressure	ambient (600–1200 mbar abs. with option r)		
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	100–230 V/50–60 Hz		
Interface	RS 232		

Flow diagram



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