

ECO PHYSICS nCLD 822 M r

Application examples



Burners
Energy supply
Certification and calibration authorities
DeNOx plants
Cement producers
Refineries
Tobacco industry
Research and development

The solution for simultaneously measured NO and NO_x has got a name: nCLD 822 M r. This analyzer even offers the possibility to measure two separate sources – a unique option!



Two instead of one.

The nCLD 822 M r nitrogen oxide analyzer is optimized for its use in systems which include gas sampling equipment to measure different samples in parallel.

The outstanding feature is the concept of two parallel reaction chambers. They guarantee simultaneous measurement of NO and NO_x in order to generate the precise value of NO₂.

The analyzer is capable of coping with two separate measurement tasks. This may include the task of comparing the values at the inlet and the outlet of a process or the direct comparison of two independent samples. The analyzer simply requires a dual inlet feature option (d) and one additional converter.

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. This module option (r) is not required in systems with an external



All external connections are hidden but easily accessible from the rear.

sample pressure regulation.

Many options can be integrated without any problem to satisfy the need for non-standardized applications. The advantage of compact design: the nCLD 822 M r includes everything inside the case – even the vacuum pump and the ozone scrubber.

User friendliness is a top priority.

The "GUI – Graphical User Interface" enables the user to take advantage of all the features and functions of the analyzer and control it by means of the integrated 8-inch color touchscreen. The instrument's settings, the accessibility and the data management can be individually configured. The operator guidance is easy understandable and provides a help function at any times.

- Four freely selectable measurement ranges [with option (d) two per channel]
- Choice between several types and numbers of converters from 0 to 2 according to the application
- Error message coded and in full text
- Rapid system integration
- Virtually maintenance-free even in continuous operation.



nCLD 822 M r

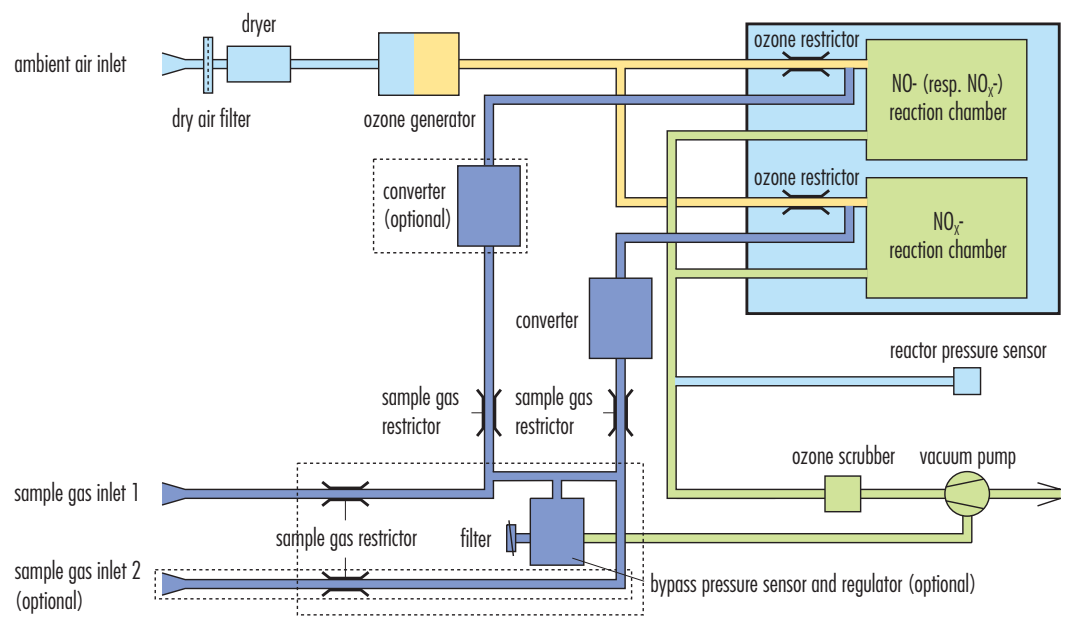
Specifications

Measuring ranges	four freely selectable ranges from 5-5000 ppm, with option d two per channel	Supply voltage	100 – 230 V / 50 – 60 Hz
Min. detectable concentration	0.25 ppm*	Interface	USB (2x), HDMI, RS232, Bluetooth, LAN, WLAN
Noise at zero point (1 σ)	0.125 ppm*	Optional	analog output with ext. box 4-20 mA; 0-1 V; 0-10 V
Lagtime	<1 sec	Dimensions	height: 133 mm (5¼") width: 450 mm (19") with moulding: 495 mm depth: 540 mm (21.2")
Rise time (0-90%)	<1 sec	Weight	23 kg (51 lb)
Temperature range	5-40 °C	Delivery includes	nCLD 822 M r analyzer, power cable, LAN connector, USB to RS232 converter cable, manual
Humidity tolerance	5-95% rel. h (non-condensing, ambient air and sample gas)	Standard	nCLD 822 M r metal converter and electromechanical pressure regulation
Quenching (with gas cooler)	for H ₂ O: <1.5% of meas. value for CO ₂ : <0.3%/vol.-% CO ₂	Options	S steel converter d dual sample gas inlet MM d dual channel NO _x /NO _x
Sample flow rate	1.2 l/min (0.1 l/min without option r)		
Input pressure	600-1200 mbar abs. (without option r to be externally stabilized within ±3 mbar)		
Dry air use for O₃ generator	internally generated (no external supply gas required)		
Power required	400 VA (incl. membrane pump and ozone scrubber)		

* depending on filter setting

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

Flow diagram



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