



ECO PHYSICS nCLD 82 M

APPLICATION EXAMPLES

- CEMS
- DeNO_x plants
- Boilers and burners
- Certification and calibration
- Research and development
- Gas turbine manufacturers



The nCLD 82 M analyzer is the next generation in single-channel high precision nitrogen oxide measurement. Unique in speed and reliability, the nCLD 82 M is modular designed and capable of measuring NO or NO_x. The new and intuitive graphical user interface "GUI" also individually displays and connects to other instruments' data.

Measurement of:

- NO/NO_x

Convenient and Highly Precise

The nCLD 82 M single channel NO/NO_x analyzer is designed for all applications with heavily polluted gasses to ensure quality control as well as keeping within threshold values. The design is strikingly compact. All components, even the vacuum pump and the thermal ozone scrubber, are contained in one single unit. Despite its convenient construction, the nCLD 82 M fulfills all requirements of the ECO PHYSICS standard. The instrument includes a temperature stabilized photo multiplier and a high-performance ozone generator. Maintenance of the analyzer is easy and economical. Furthermore, the analyzer is optionally upgradeable to assess additional parameters.

User Friendliness with "GUI"

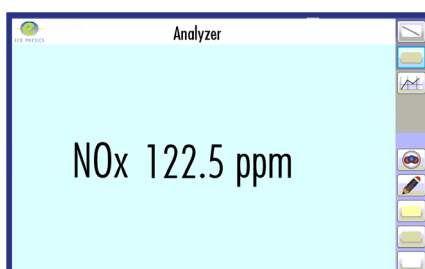
The new and intuitive touch sensitive graphical user interface "GUI" enables the user to individually adjust the instrument operation and data management according to his/her needs and applications. The bright 8" monitor gives a clear overview and allows numerical and graphical display of values. Multiple digital in- and outputs guarantee a maximal connectivity and flexibility for the remote operation, control and maintenance of the nCLD 82 M.

Compact, Modular and Intelligent!

The nCLD 82 M is manufactured in a new compact and modular layout, in which each essential component of the chemiluminescence analyzer hosts its own CPU and interacts with other CPUs by BUS-communication. This assembly increases accessibility and serviceability by reducing wiring and piping. The measurement principle will conform to the standard method for NO_x-detection in stationary source emissions (EN 15267).

- Rapid system integration and rack mounting
- Compact and modular design
- Virtually maintenance free even in continuous operation
- Four freely selectable measuring ranges

Graphical user interface "GUI" for individual analyzer operation and data management



Measurably better

SPECIFICATIONS

nCLD 82 M

Measuring ranges	four freely selectable ranges from 5 ppm – 5'000 ppm
Min. detectable concentration*	0.12 ppm
Noise at zero point (1σ)*	0.06 ppm
Lag time	<1 sec
Rise time (0–90%)	<1 sec
Temperature range	0 - 40 °C
Humidity tolerance	5 - 95% rel. h (non-condensing, ambient air and sample gas)
Sample flow rate	1.0 l/min
Dry air flow rate	0.4 l/min
Input pressure	600-1200 mbar abs.
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	100–240 V / 50–60 Hz
Interface	USB(3x), HDMI, Bluetooth, RS232 (w/o 9pin connector), LAN, WLAN
Dimensions	height: 133 mm (5¼ ") width: 450 mm (19 ") with molding: 495 mm depth: 540 mm (21.2 ")
Weight	23 kg (51 lb)
Delivery includes	nCLD 82 M analyzer, power cable, FTDI-RS232-USB cable, USB-LAN adapter, HDMI adapter
Standard	nCLD 82 M · M - metal converter
Options	<ul style="list-style-type: none"> · V1 - single calibration valve · V2 - two calibration valves for pressurized calibration (zero & span / 2-3 bar) · h - hot tubing · r - electro-mechanical pressure regulation · USB-RS232 9pin connector · 0 - 10 V · 4 - 20 mA into 500 Ω max.
Analog output (External Box)	

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FLOW DIAGRAM

* depending on filter setting
Connectivity properties are country-specific
ECO PHYSICS reserves the right to change these specifications without notice.

