



# ECO PHYSICS nCLD 822 Mh



## APPLICATION EXAMPLES

- Gas manufacturers
- Manufacturers of gas turbines
- Certification and calibration
- DeNOx plants
- Stack gas measurement
- Petrol industry
- Research and development

**The nCLD 822 Mh analyzer is the next generation in two-channel high precision nitrogen oxide measurement. Unique in speed and reliability, the nCLD 822 Mh is modular designed and capable of simultaneously measuring NO, NO<sub>2</sub> and NO<sub>x</sub> from hot and humid gas sources without additional cooler. The new and intuitive graphical user interface "GUI" also individually displays and connects to other instruments' data.**

Measurement of:

- NO
- NO<sub>2</sub>
- NO<sub>x</sub>

### nCLD - A New Generation

The nCLD 822 Mh includes everything that is needed for measuring NO, NO<sub>2</sub> and NO<sub>x</sub> in unpreconditioned gas samples. The fully revised detector-block, the enhanced gas flow paths and the improved pressure as well as temperature independence of the nCLD 800 Series instruments allow for even lower detection limits. Overall stability and reliability are lifted to a new level. The integrated hot tubing enables the instrument to analyze hot and moist sources without external gas preconditioning unit, allowing highly precise analysis. The calibration of the unit runs quickly and automatically, with all necessary data stored and available anywhere and at any time.

### User Friendliness with "GUI"

The new 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 for your remote operation, control and maintenance of the nCLD 822 Mh, ensuring unsurpassed precision and reliability.

### Compact, Modular and Intelligent!

The nCLD 822 Mh 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<sub>x</sub>-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

Analyzer	
NO	2895.5 ppm
NOx	2937.5 ppm
NO2	42.0 ppm

Measurably better

# SPECIFICATIONS

# nCLD 822 Mh

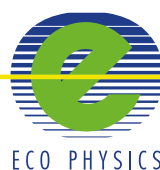
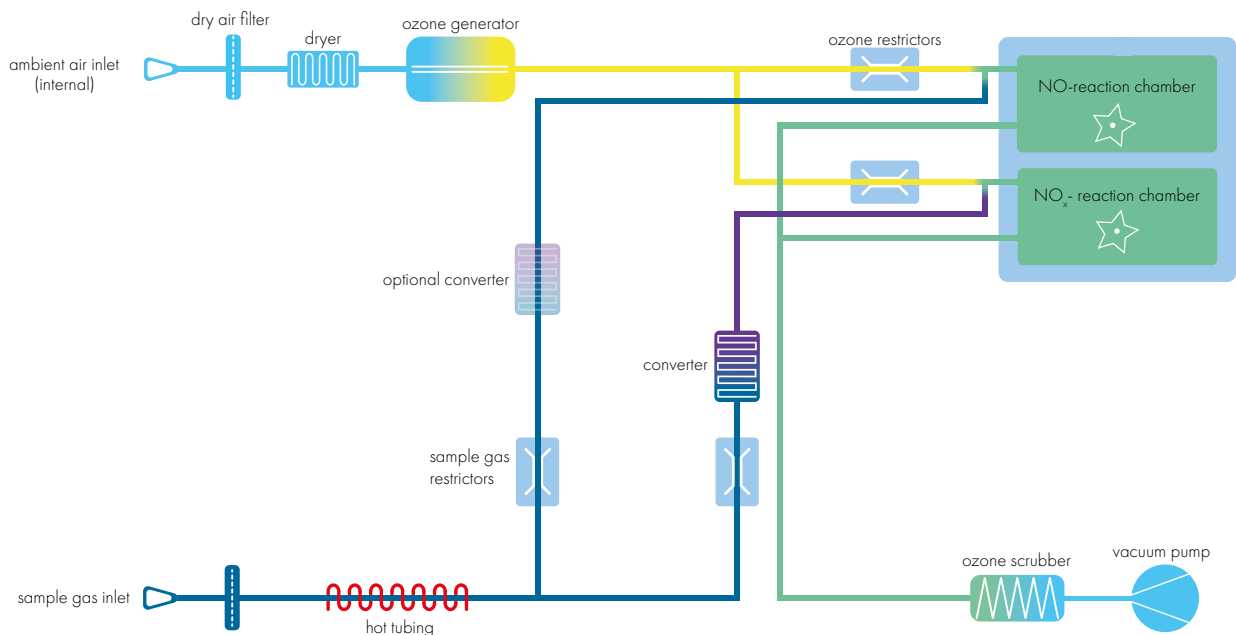
Measuring ranges	four freely selectable ranges from 5 ppm - 5'000 ppm
Min. detectable concentration*	0.12 ppb
Noise at zero point ( $1\sigma$ )*	0.06 ppb
Lag time	<3 sec
Rise time (0-90%)	<1 sec
Temperature range	0 - 40 °C
Humidity tolerance	5 - 95% rel. h (non-condensing, ambient air and sample gas)
Sample flow rate	1.0 l/min
Dry air flow rate	0.3 l/min
Input pressure	600-1'200 mbar abs.
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	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 822 Mh analyzer, power cable, FTDI-RS232-USB cable, USB-LAN adapter, HDMI adapter
Standard	nCLD 822 Mh · M - metal converter · h - hot tubing
Options	· V1 - single calibration valve · V2 - two calibration valves for pressurized calibration (zero & span / 2-3 bar) · r - electro-mechanical pressure regulation · USB-RS232 9pin connector · 0 - 10 V · 4 - 20 mA into 500Ω 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.



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