ECO PHYSICS **nCLD 82 S**

APPLICATION EXAMPLES

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

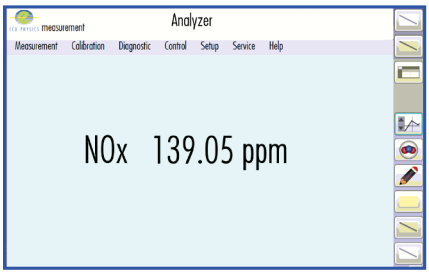
The nCLD 82 S analyzer is the next generation in high precision single-channel nitrogen oxide measurement. Unique in speed and reliability, the nCLD 82 S is modular designed and capable of measuring NO_x from hot and humid gas sources without additional cooler. The new and intuitive graphical user interface also individually displays and connects to other instruments' data.

Measurement of:

- **NO/NO_x**

Convenient and Highly Precise

The nCLD 82 S includes everything for measurement of NO or NO_x. 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 optional electro-mechanical bypass system balances out even fastest pressure variations occurring in the sample flow. Furthermore, the analyzer is adaptable to numerous non-standardized applications. The calibration of the unit runs quickly and automatically, with all necessary data available anywhere and at any time.



Graphical user interface for individual analyzer operation and data management

User Friendliness

The new touch sensitive graphical user interface enables the user to individually adjust the instrument operation and data management according to his/her needs and applications. The bright 7" 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 S.

Compact, Modular and Intelligent!

The nCLD 82 S 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

Measurably better

SPECIFICATIONS

nCLD 82 S

Analyzer type	single chamber CLD with cooled PMT for measurement of NO or NO_x
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	<3 sec
Rise time (0 - 90%)	<1 sec
Temperature range	5 - 40 °C
Humidity tolerance	5 - 95% rel. h (non-condensing, ambient air and sample gas)
Sample flow rate	1.0 l/min
Input pressure	600 -1'200 mbar abs.
Dry air use for O_3 generator	internally generated (no external supply gas required)
Power required	350 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 S analyzer, power cable, FTDI-RS232-USB cable, USB-LAN adapter, HDMI adapter
Standard	nCLD 82 S	· **S** - steel converter
Options		· **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
	Analog output (External Box)	· 0 - 10 V 4 - 20 mA into 500 Ω max.

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

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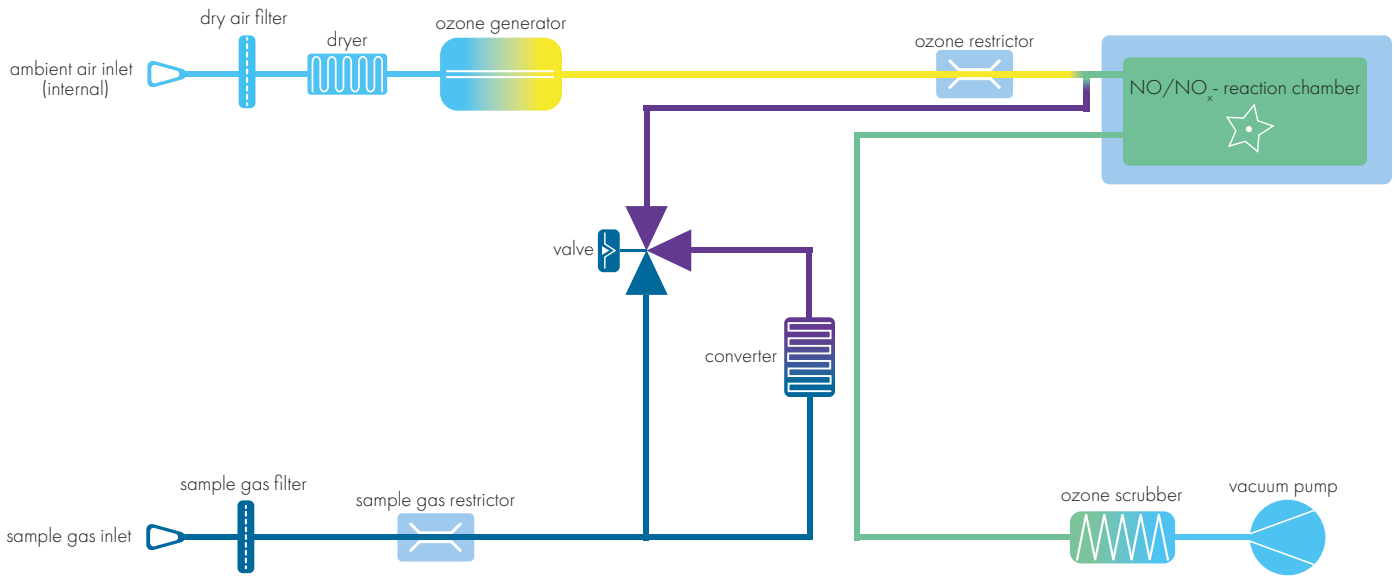
FLOW DIAGRAM



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