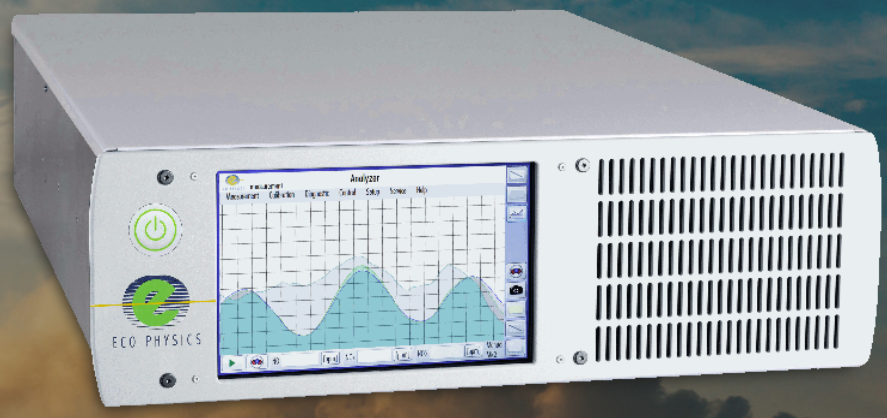
ECO PHYSICS **nCLD EL**

APPLICATION EXAMPLES

- *Stack emission measurement*
- *Surveillance of ship engines*
- *Boiler and burner operation*
- *Gas turbine installations*
- *Research and development*
- *Certification and calibration*



The nCLD EL is the next generation in single-channel NO/NO_x measurement. Unique in speed and precision, the nCLD EL is modular designed and allows the continuous measurement of concentrations in the range of parts per million. Its new and intuitive user interface individually displays and connects to other instrument's data.

Measurement of:

- **NO / NO_x**

Precise and Reliable

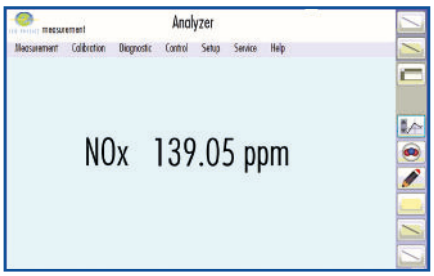
The nCLD EL with metal converter fulfills the specific requirements for exact and economical monitoring of NO/NO_x, in order to ensure compliance with relevant norms and regulations. All necessary data, such as calibration history, instrument status and warning conditions are continuously stored and available anywhere and at any time. The analyzer is designed for either mobile or stationary operation in line with an existing gas preconditioning unit, which ensures quality control as well as staying within threshold values. The calibration and adjustment of the unit runs quickly and automatically, ensuring unsurpassed precision and reliability.

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 EL.

Compact, Modular and Intelligent!

The nCLD EL 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).



Graphical user interface for individual analyzer operation and data management

- Compact and modular design
- Guided touchscreen operation
- Mobile DC operation
- Remote operation, control and maintenance
- Metal or steel converter for NO_x detection
- Four freely selectable measuring ranges

Measurably better

SPECIFICATIONS

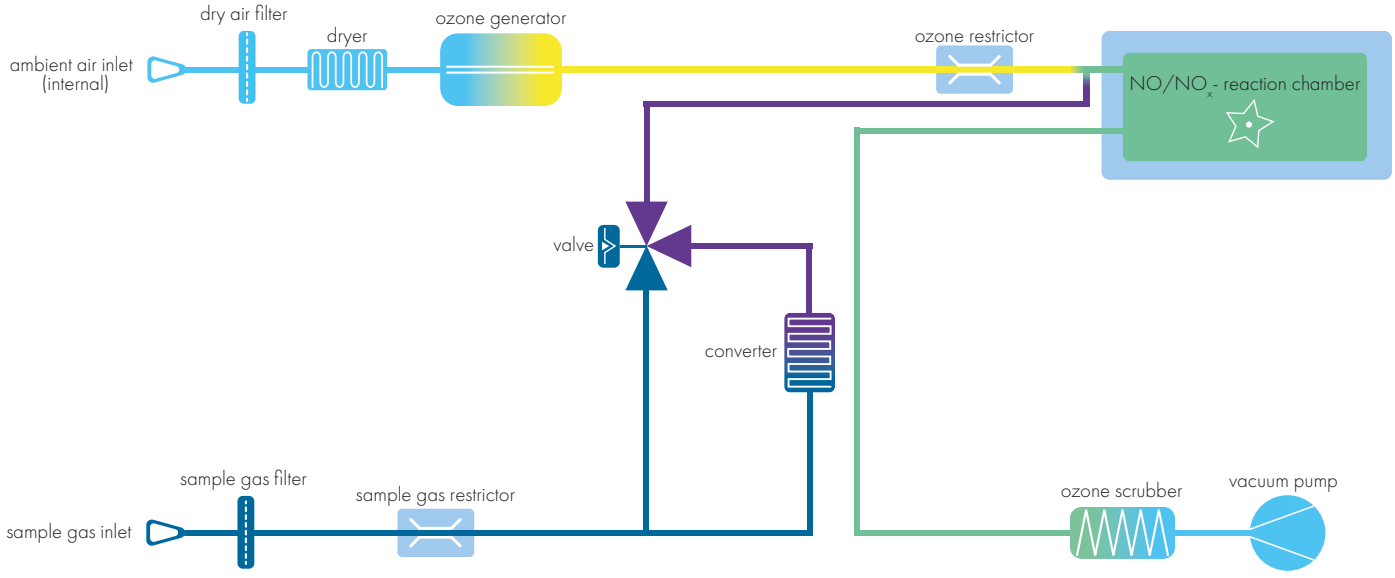
nCLD EL

Analyzer type	single chamber CLD for measurement of NO or NO_x
Measuring ranges	four freely selectable ranges from 0.5 ppm - 500 ppm
*Min. detectable concentration**	0.05 ppm
*Noise at zero point (1σ)**	0.025 ppm
Lag time	<3 sec
Rise time (0 - 90%)	<3 sec
Temperature range	5 - 40 °C
Humidity tolerance	5 - 95% rel. h (non-condensing, ambient air and sample gas)
Sample flow rate	0.3 l/min
Input pressure	ambient ext. stabilized within ±3 mbar
Dry air use for O_3 generator	internally generated (no external supply gas required)
Power required	300 VA 250 VA external membrane pump

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 ") depth: 540 mm (21.2 ")
Weight		16 kg (35 lb) without pump
Delivery includes		nCLD EL analyzer, power cable, USB-LAN adapter
Standard	nCLD EL M	· **M** - metal converter
Options		· toggle mode for NO_2 measurement · 24 V operation incl. DC vacuum pump · inlet filter · rack mount slides · FTDI-RS232-USB cable · HDMI cable · 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.

FLOW DIAGRAM



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