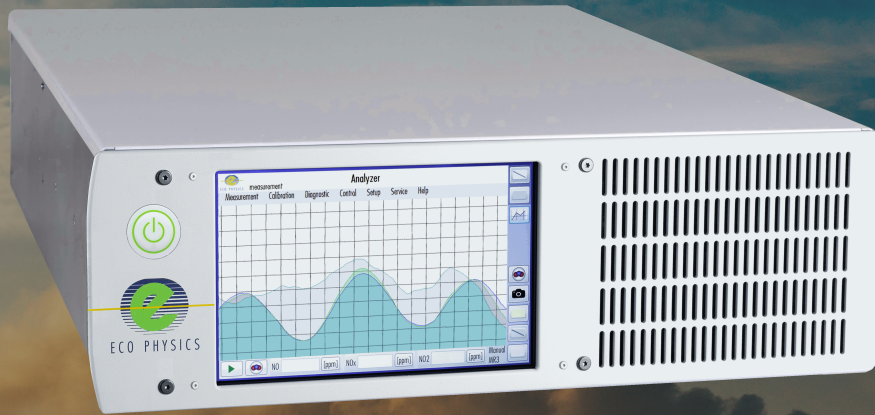




# ECO PHYSICS nCLD EL

## APPLICATION EXAMPLES

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



The nCLD EL is the next generation in single-channel NO/NO<sub>x</sub> measurement. Unique in speed and precision, the nCLD EL allows the continuous measurement of concentrations in the range of parts per million. The measuring principle complies with international emissions monitoring regulations and its new and intuitive user interface individually displays and connects to other instruments' data.

### Measurement of:

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

### Precise and Reliable

The nCLD EL with metal converter fulfills the specific requirements for exact and economical monitoring of NO/NO<sub>x</sub>, 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 sequence and adjustment of the unit runs quickly and automatically, ensuring unsurpassed precision and reliability.

### User Friendliness

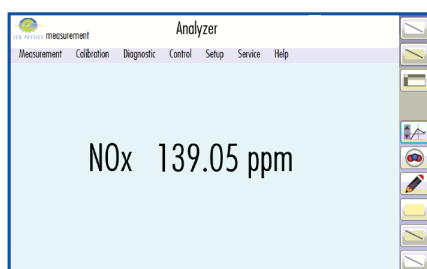
The new touch sensitive graphical user interface enables the user to individually adjust the instrument operation and data management according to his/ her needs and applications. The bright 7" monitor gives a clear overview and allows numerical and graphical display of values. Multiple digital in- and 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<sub>x</sub>-detection in stationary source emissions (EN 15267).

- Compact and modular design
- Guided touchscreen operation
- Mobile DC operation
- Remote operation, control and maintenance
- Metal converter for NO<sub>x</sub> detection
- Four freely selectable measuring ranges

Graphical user interface for individual analyzer operation and data management



Measurably better

# SPECIFICATIONS

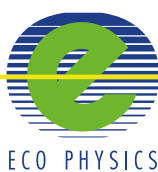
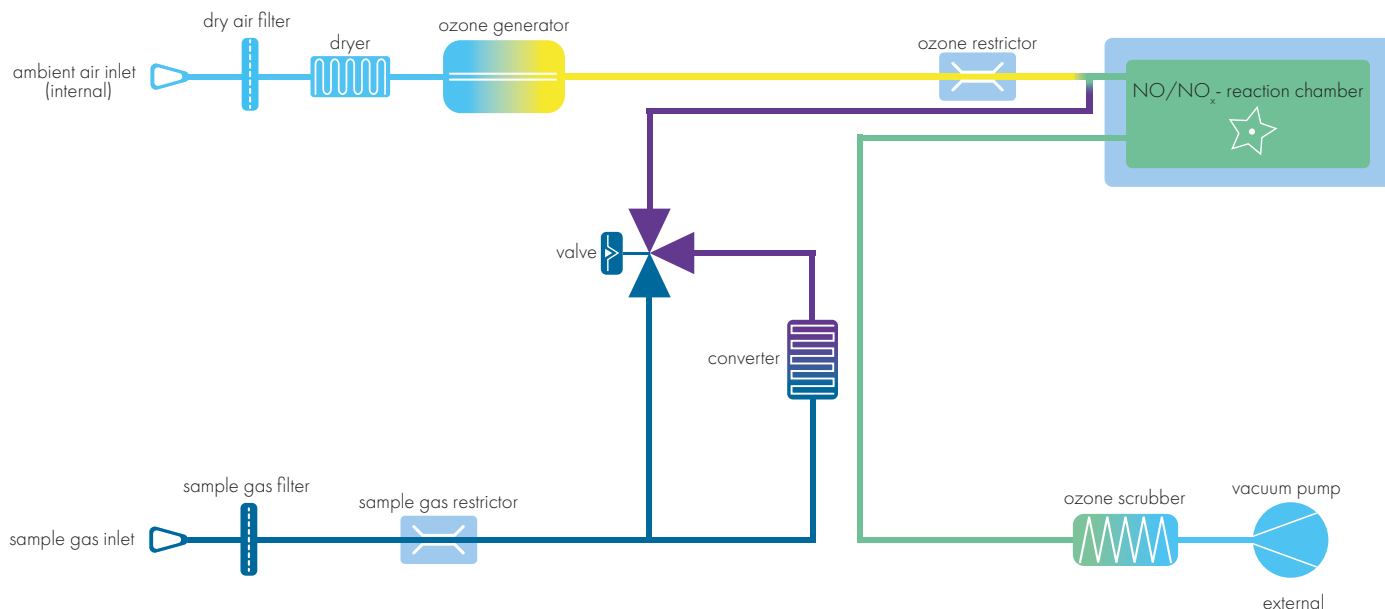
# nCLD EL

<b>Analyzer type</b>	single channel CLD for measurement of NO or NO <sub>x</sub>	<b>Supply voltage</b>	110 V / 230 V/50 - 60 Hz
<b>Measuring ranges</b>	four freely selectable ranges from 0.5 ppm - 500 ppm	<b>Interface</b>	USB(3x), HDMI, Bluetooth, RS232 (w/o 9pin connector), LAN, WLAN
<b>Min. detectable concentration*</b>	0.05 ppm	<b>Dimensions</b>	height: 133 mm (5¼") width: 450 mm (19") depth: 540 mm (21.2")
<b>Noise at zero point (1σ)*</b>	0.025 ppm	<b>Weight</b>	16 kg (35 lb) without pump
<b>Lag time</b>	<3 sec	<b>Delivery includes</b>	nCLD EL analyzer, power cable, USB-LAN adapter
<b>Rise time (0 - 90%)</b>	<3 sec	<b>Standard</b>	nCLD 63 M · <b>M</b> - metal converter · External pump · External power supply
<b>Temperature range</b>	5 - 40 °C	<b>Options</b>	· toggle mode for NO <sub>2</sub> measurement · 24 V operation incl. DC vacuum pump · inlet filter · rack mount slides · FTDI-RS232-USB cable · HDMI cable · USB-RS232 9pin connector · 0 - 10 V · 4 - 20 mA into 500 Ω max.
<b>Humidity tolerance</b>	5 - 95% rel. h (non-condensing, ambient air and sample gas)	<b>Analog output (External Box)</b>	
<b>Sample flow rate</b>	0.2 l/min		
<b>Input pressure</b>	ambient ext. stabilized within ±3 mbar		
<b>Dry air use for O<sub>3</sub> generator</b>	internally generated (no external supply gas required)		
<b>Power required</b>	300 VA 250 VA external membrane pump		

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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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