## 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:

 $\bullet NO / NO_{y}$ 

#### **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 stavina within threshold values. The calibration and adjustment of the unit runs quickly and automatically, ensuring unsurpassed precision and reliability.

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 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).

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

**Measurably better** 

## **SPECIFICATIONS**

# nCLD EL

Analyzer type	single chamber CLD for measurement of	Supply voltage		100 - 240 V/50 - 60 Hz
Measuring ranges	four freely selectable ranges from 0.5 ppm - 500 ppm	Interface		USB{3x}, HDMI, Bluetooth, RS232 (w/o 9pin connector), LAN, WLAN
Min. detectable concentration*	0.05 ppm	Dimensions		height: 133 mm (51⁄4 ″) width: 450 mm (19 ″) depth: 540 mm (21.2 ″)
Noise at zero point (1 $\sigma$ )*	0.025 ppm			
Lag time	<3 sec	Weight		16 kg (35 lb) without pump
Rise time (O - 90%)	<3 sec	Delivery includes		nCLD EL analyzer, power cable, USB-LAN adapter
Temperature range	5 - 40 °C	Standard		• M motal convertor
Humidity tolerance	5 - 95% rel. h (non-condensing, ambient air and sample gas)	Options Analog output (External Box)		<ul> <li>toggle mode for NO<sub>2</sub> measurement</li> <li>24 V operation incl. DC vacuum pump</li> <li>inlet filter</li> <li>rack mount slides</li> <li>FTDI-RS232-USB cable</li> <li>HDMI cable</li> <li>USB-RS232 9pin connector</li> <li>0 - 10 V</li> <li>4 - 20 mA into 500 Ω max.</li> </ul>
Sample flow rate	0.3 l/min			
Input pressure	ambient ext. stabilized within $\pm 3$ mbar			
Dry air use for $O_{\rm 3}$ generator	internally generated (no external supply gas required)			
Power required	300 VA 250 VA external membrane pump			

### **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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