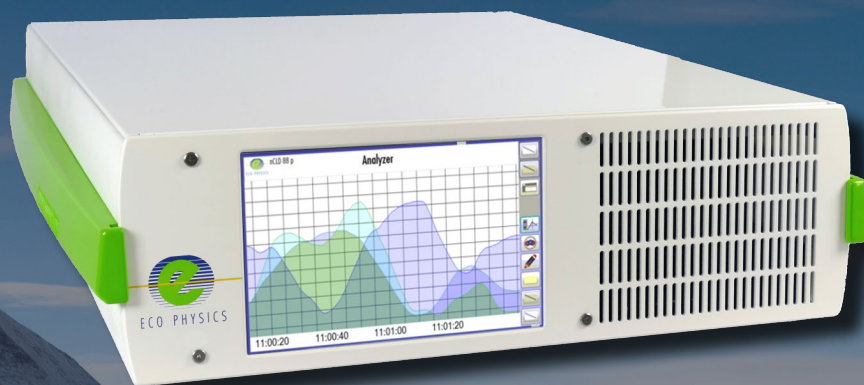




# ECO PHYSICS nCLD 88 p

## APPLICATION EXAMPLES

- Ambient air monitoring
- Clean room monitoring
- Surveillance of chem. processes
- Surveillance of R&D processes
- Biomed. and pharma research
- Plant physiological research
- Certification and calibration



The nCLD 88 p is the next generation in measuring smallest amounts of NO/NO<sub>x</sub> and NO<sub>2</sub>. Unique in speed and precision, the nCLD 88 p is modular designed and specifically built for combination with the PLC 860. It allows the measurement of concentrations in the range of parts per trillion and is expandable to assess additional nitrogen oxide based parameters. Its new and intuitive user interface "GUI" also individually displays and connects to other instruments' data.

### Precise and Reliable

The nCLD 88 p fulfills the requirements of many research groups specializing in detection and monitoring smallest quantities of NO<sub>2</sub> within less than thirty seconds response time and less than one second lag-time. NO<sub>2</sub> measurement is accomplished by a sequential detection of NO and NO<sub>x</sub> by means of the photolytic converter PLC 860. The pre chamber minimizes zero drift and cross sensitivity. This makes it ideally suited for areas with excellent air quality. The photolytic converter PLC 860 can be replaced by the optionally available molybdenum converter. Calibration and adjustment of the unit runs quick and automatic, ensuring unsurpassed precision and reliability.

### User Friendliness with "GUI"

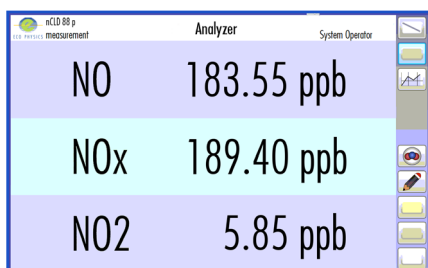
The new touch sensitive graphical user interface "GUI" enables the user to individually adjust the instrument operation and data management according to his/her needs and applications. All necessary data is continuously and available. The bright 8" monitor gives a clear overview and allows numerical and graphical display of values. Multiple digital in- and outputs guarantee a maximal connectivity and flexibility for the remote operation and maintenance of the nCLD 88 p.

### Compact, Modular and Intelligent!

The nCLD 88 p 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 conforms to the standard method for NO<sub>x</sub>-detection in ambient air (EN 14211).

- Compact design without additional space required
- Photolytic converter for NO<sub>2</sub> detection
- Pre chamber to offset cross sensitivity
- Four freely selectable measuring ranges
- Rapid system integration

Graphical user interface "GUI" for individual analyzer operation and data management



**Measurably better**

## SPECIFICATIONS

## nCLD 88 p

Measuring ranges	four freely selectable ranges from 5–5000 ppb	Supply voltage	100–230 V/50–60 Hz
Min. detectable concentration*	0.05 ppb	Interface	USB(2x), HDMI, Bluetooth, RS232 (w/o 9pin connector), LAN, WLAN
Noise at zero point ( $1\sigma$ )*	0.025 ppb	Dimensions	height: 133 mm (5¼ ") width: 450 mm (19 ") with molding: 495 mm depth: 540 mm (21.2 ")
Lag time	<1 sec	Weight	23 kg (51 lb)
Rise time (0–90%)	<30 sec	Delivery includes	nCLD 88 p analyzer, power cable, FTDI-RS232-USB cable, USB-LAN adapter, manual
Temperature range	5 - 40 °C	Standard	nCLD 88 p PLC 860, pre chamber
Humidity tolerance	5 - 95% rel. h (non-condensing, ambient air and sample gas)	Options	· molybdenum converter · electro-mechanical pressure regulation · USB-RS232 9pin connector · 0 - 10 V/4 - 20 mA into 500 $\Omega$ max.
Sample flow rate	0.3 l/min	Analog output (External Box)	
Input pressure	to be externally stabilized within $\pm 3$ mbar		
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)		

## FLOW DIAGRAM

\* depending on filter setting  
ECO PHYSICS reserves the right to change these specifications without notice.

