



# ECO PHYSICS Liquid NO

## APPLICATION EXAMPLES

- Agricultural research
- Medical research
- Plant physiological research
- Cell biological research



**The nCLD 88et analyzer combined with the chemostat system offers precise measurement of nitric oxide in liquid samples. The extremely high sensitivity and fast response time of the nitrogen oxide analyzer allows the detection of concentrations in the range of parts per trillion.**

Measurement of:

- NO

### Convenient and Precise

The Liquid NO system guarantees flexibility for standard applications as well as scientific research. The nCLD 88et combined with the liquid purge vessel measures nitrites, nitrates and nitroso thiols in biological fluids like plasma, urine and sera down to pMol concentrations. Easy and accurate data recording and analysis is guaranteed by using the PowerChrom™ software from EDAQ.

### Liquid Applications

- Reduction of nitrate using vanadium (III) and hydrochloric acid at 90°C.
- Reduction of nitrite using iodide and acetic acid.
- Reduction of nitroso thiols using a modified Sacville Reaction or CU/ Cystine.

### User Friendliness

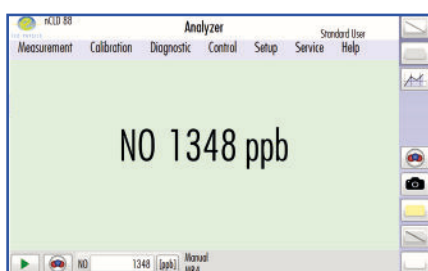
The new touch sensitive graphical user interface enables the user to individually adjust the instrument operation and data management according to his/ her needs and applications. The bright, seven inch monitor gives a clear overview and allows numerical and graphical display of values. Multiple digital in- and outputs guarantee a maximal connectivity for your remote operation, control and maintenance of the nCLD 88et, ensuring unsurpassed precision and reliability.

### Compact, Modular and Intelligent!

The nCLD 88et 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, while ensuring minimal maintenance costs.

- Fast and precise
- Compact and modular design
- User friendly software package
- Biomedical and laboratory applications
- Measurement of gas and liquid samples

Graphical user interface for individual analyzer operation and data management



Measurably better

# SPECIFICATIONS

# Liquid NO

## NO related specifications

Measuring ranges 0.1 ppb to 5'000 ppb (gas samples)  
pico- to millimolar (liquid samples)

Detection limit < 0.1 ppb, sample tube type 1 (recommended)  
< 0.06 ppb, sample tube type 3

Lag time < 3,5 sec

Rise time (0-90%) < 1 sec

Fall time (0-90%) < 1 sec

Internal sampling rate 40 Hz

Data output rate 15 Hz

Linearity < 1% of full scale

Zero-point drift < 0.5 ppb / 6 h

## Operating specifications

Interface USB(3x), HDMI, Bluetooth, RS232 (w/o 9pin connector), LAN, WLAN

Temperature range 10 to 40°C

Permitted humidity range 5 to 95% rel. h (non-condensing)

## Operating specifications

Sample flow rate 110 ml/min  $\pm$  10 %, sample tube type 1 (recommended)  
330 ml/min  $\pm$  10 %, sample tube type3

Cal. gas concentration 0.1 to 4 ppm NO in N<sub>2</sub> (1 ppm recommended)

Power uptake 400 VA max

Mains voltage 100 to 240 V, 50/60 Hz

Dimensions nCLD 88 height: 133 mm (5¼")  
width: 450 mm (19")  
depth: 540 mm (21.2")

Weight 24 kg

Delivery includes nCLD 88et analyzer, power cable, FTDI-RS232-USB cable, USB-LAN adapter, liquid purge vessel, EDAQ Power ChromTM, Analog I/O-Box

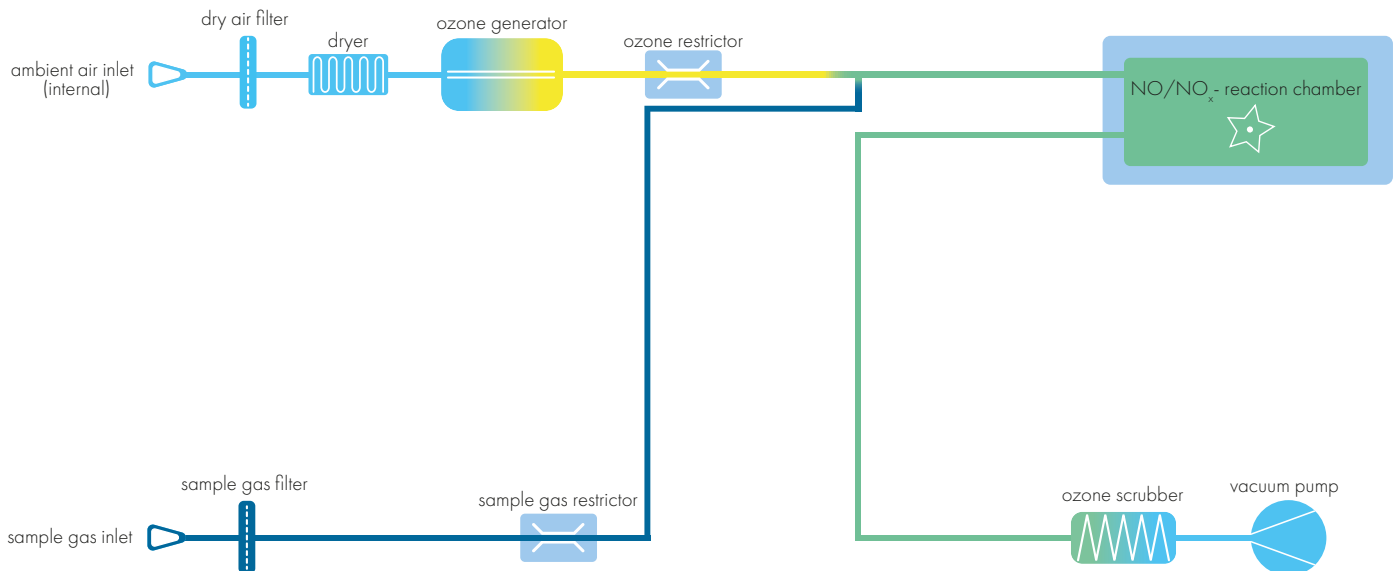
Options · USB-RS232 9pin connector

Connectivity properties are country-specific  
ECO PHYSICS reserves the right to change these specifications without notice.

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# FLOW DIAGRAM

# nCLD 88et



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