# ECOPHYSICS 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 nitogen 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 PowerChromTM 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.

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, 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

**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

Sample flow rate	110 ml/min ± 10 %, sample tube type 1 (recommended) 330 ml/min ± 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 n88000-Liq	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

**Operating specifications** 

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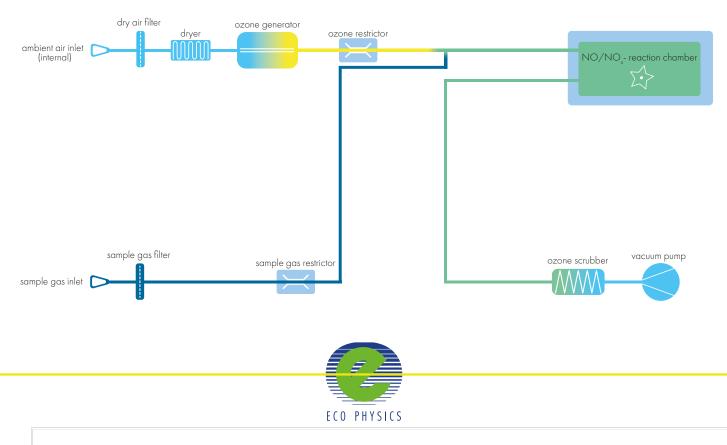
### **Operating specifications**

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)

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

# nCLD 88et

# **FLOW DIAGRAM**



ECO PHYSICS INC. . 3915 Research Park Drive, Suite A-3 . ANN ARBOR, MI 48108-2200 . USA . Phone: (734) 998-1600