

# ANALYZER CLD 88

Fast and precise chemiluminescence NO-analyzer for liquid NO analysis



## Your advantage:

**Fast and precise**

**Compact**

**User friendly**

**Biomedical and laboratory applications**

**Measurement of gas and liquid samples**

**Easy to perform one-button-calibration**

The ANALYZER CLD 88 offers fast and precise measurement of nitric oxide. The extremely high sensitivity and fast response time of the NO-analyzer allows the detection of concentrations in the range of parts per trillion. Ease of use and the open concept guarantee flexibility for standard applications as well as scientific research. The optional liquid purge vessel enables the measurement of nitric oxide, nitrite, nitrate or nitrosothiols in most biological fluids. The easy and accurate data recording and analysis is guaranteed by using the PowerChrom™ software from EDAQ.

## When precision counts

The ANALYZER CLD 88 is the "gold standard" in precision and speed for research laboratories and medical applications. Even smallest variations of nitric oxide are detected and monitored. Selectable sample flows and electronically filtering enables the adaptation to various biomedical, pharmaceutical and laboratory applications. The instrument may be used for any measurement where NO can be detected in gases. In combination with the optional purge vessel the CLD 88 measures nitric oxide, nitrites, nitrates and nitrosothiols in biological fluids like plasma, urine and sera.

## Standard applications

- Analyzing of gas samples in any environment down to ppt range
- Liquid samples in combination with the purge vessel down to picomole
- Exhaled nitric oxide analysis in combination with the optional flow measurement.

The flexible concept of the ANALYZER CLD 88 enables future hard and software upgrades as well as easy adaptation for scientific research applications.

## Easy to perform calibration

The accuracy of the chemiluminescence detection is strongly dependent on the calibration of the analyzer. In order to assure reliability of its results the ANALYZER CLD 88 has an integrated calibration module for zero level and the NO reference gas. Calibration is quickly and automatically carried out by pressing a button on the keypad (one-button-calibration). The unique feature eliminates the potential risk of erroneous calibrations.

## Compact and modular

The ANALYZER CLD 88 is the most compact instrument in its class. Thanks to the totally modular layout this analyzer is designed for multitude of applications.

Low yearly maintenance costs, integrated test software, local service and standard calibration gas guarantee economic and low running costs during the lifetime of the instrument.

## Data recording and analysis

The optional PowerChrom™ software allows easy data collection and flexible analysis. PowerChrom™ software combines easy calibration, data display and analysis of chromatographic data.

## Specifications CLD 88

### NO-measurement:

#### Measuring ranges

Gas samples:	0.1 – 5000 ppb
Liquid samples:	pico- to millimolar
Min. detectable concentration:	0.06 ppb *
Noise at zero-point ( $1\sigma$ ):	0.03 ppb *
Zero drift:	< 0.5 ppb per 6 h
Linearity:	± 1% full scale
Lag time:	< 0.5 sec
Rise time (T90):	< 100 milliseconds
Sample flow:	selectable type 1 or 3 (110 or 330 ml/min)
Sampling rate:	40 Hz internal, 10 Hz output

### Interface:

Output: RS 232 or analogue (optional)

### General:

Temperature range:	10 – 40 °C
Humidity tolerance:	5–95% rel. humidity (non condensing)
Ozone generator:	internal, maintenance free (no external supply gas required)
Ozone scrubber:	internal, thermal, maintenance free
Power consumption:	400 VA
Supply voltage:	100 - 240 V/50 - 60 Hz
Weight:	24 kg
Dimensions:	H x W x D: 135 x 500 x 540 mm (5 ¼ x 19 x 17 ")
System includes:	ANALYZER CLD 88, sample tube type 3, mains cable and operator's manual

(\*) Depending on sample flow

(Note: NO-calibration gases, liquid purge vessel, the PowerChrom software and PC are optional)

Documentation in English language only

## The optional solution for easy and flexible chromatographic data analysis

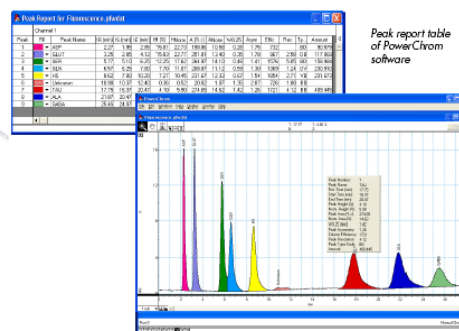
PowerChrom™ system with software from EDAQ:

The "all in one" solution for liquid NO analysis.

- Calibration
- Sampling
- Analysis
- Reporting



Liquid purge vessel



Peak report table of PowerChrom software

Data Analysis

ECO MEDICS reserves the right to change the specifications of the CLD 88 without notice.  
EDAQ reserves the right to change the specifications of the PowerChrom system and software without notice.



ECO MEDICS

ECO MEDICS:

ECO MEDICS AG • PO BOX • CH-8635 DUERNTEN • TEL +41 55 220 22 11 • FAX +41 55 220 22 15 • E-MAIL INFO@ECOMEDICS.COM • WWW.ECOMEDICS.COM

EDAQ:

ADInstruments GMBH • D-74937 SPECHBACH • TEL +49 6226 97 01 05 • FAX +49 6226 97 01 06 • E-MAIL INFO@ADINSTRUMENTS.DE • WWW.EDAQ.COM

CLD88-V14EDAQ

