



# ECO PHYSICS nCLD AL<sup>2</sup>

## APPLICATION EXAMPLES

- Ambient air monitoring
- Outdoor and indoor application
- Certification and calibration
- Research



*The nCLD AL<sup>2</sup> is the next generation in two-channel high precision ambient air monitoring instrumentation. Unique in speed and reliability, the nCLD AL<sup>2</sup> is modular designed and capable of simultaneously measuring NO, NO<sub>2</sub> and NO<sub>x</sub>. The analyzers expandable capabilities allow assessment of additional nitrogen based parameters. Its graphical user interface also individually displays and connects to other instruments' data.*

### Measurement of:

- NO
- NO<sub>2</sub>
- NO<sub>x</sub>

### Flexible Ambient Air Monitoring

The nCLD AL<sup>2</sup> is the ideal instrument for ambient air monitoring, either installed in racks, fixed monitoring stations or mobile laboratories. Besides the ambient air in the open environment, the analyzer is also suitable for air quality monitoring in production plants and offices (TLV = threshold limit value). The nCLD AL<sup>2</sup> is a two-channel NO<sub>x</sub>-detector based on a modular principle. The measurement ranges are individually adjustable, the parameters are NO, NO<sub>2</sub> and NO<sub>x</sub> and the instrument's inlet operates at ambient pressure. Calibration of the unit runs quick and automatic while all necessary data is continuously stored and readily available anywhere and at any time.

### 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 AL<sup>2</sup>, ensuring unsurpassed precision and reliability.

### Compact, Modular and Intelligent!

The nCLD AL<sup>2</sup> 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<sub>x</sub>-detection in ambient air (EN 14211).

- Rapid system integration and rack mounting
- Compact and modular design
- Virtually maintenance free even in continuous operation
- Four freely selectable measuring ranges

Graphical user interface for individual analyzer operation and data management

Parameter	Value
NO	634.0 ppb
NO <sub>x</sub>	644.0 ppb
NO <sub>2</sub>	10.0 ppb

**Measurably better**

# SPECIFICATIONS

# nCLD AL<sup>2</sup>

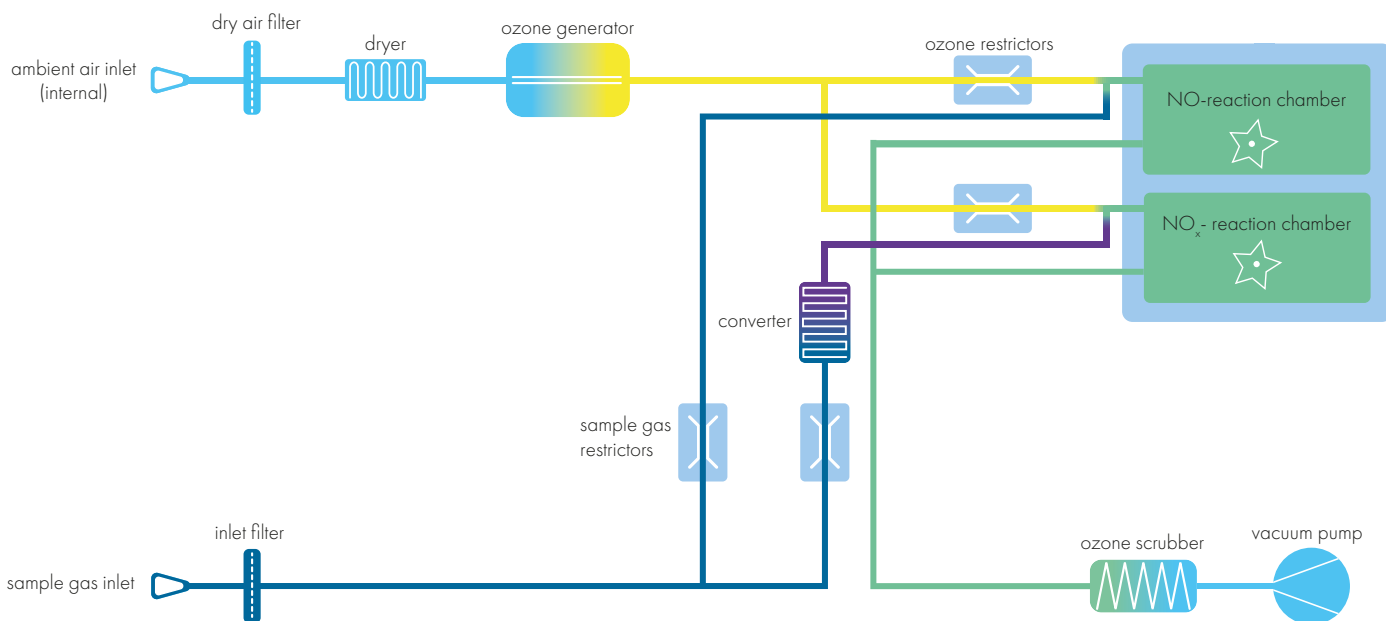
Analyzer type	dual chamber CLD with cooled PMT for simultaneous measurement of NO, NO <sub>2</sub> , NO <sub>x</sub>
Measuring ranges	four freely selectable ranges from 100 ppb - 50'000 ppb
Min. detectable concentration*	0.4 ppb
Noise at zero point (1σ)*	<0.2 ppb
Lag time	<3 sec
Rise time (0 - 90%)	<1 sec
Temperature range	0 - 40 °C
Humidity tolerance	5 - 95% rel. h (non-condensing, ambient air and sample gas)
Sample flow rate	1.0 l/min
Input pressure	600 - 1200 mbar abs.
Dry air use for O <sub>3</sub> generator	internally generated (no external supply gas required)

Power required	350 VA (incl. membrane pump and ozone scrubber)
Supply voltage	100 - 240 V/50 - 60 Hz
Interface	USB(3x), HDMI, Bluetooth, RS232 (w/o 9pin connector), LAN, WLAN
Dimensions	height: 133 mm (5¼ ") width: 450 mm (19 ") with molding: 495 mm depth: 540 mm (21.2 ")
Weight	23 kg (51 lb)
Delivery includes	nCLD AL <sup>2</sup> analyzer, power cable, FTDI-RS232-USB cable, USB-LAN adapter, HDMI adapter
Standard	nCLD AL <sup>2</sup> · <b>Y</b> - molybdenum converter
Options	· USB-RS232 9pin connector · 0 - 10 V · 4 - 20 mA into 500 Ω max.
Analog output (External Box)	

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# 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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