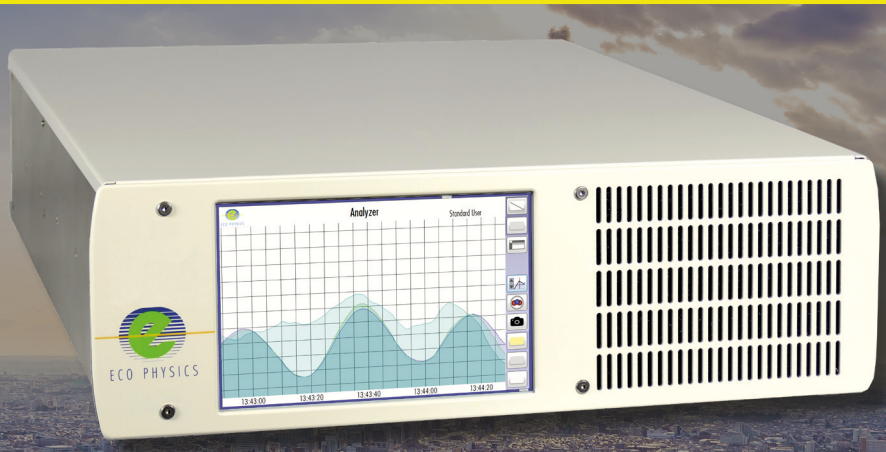
ECO PHYSICS nCLD AL



APPLICATION EXAMPLES

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

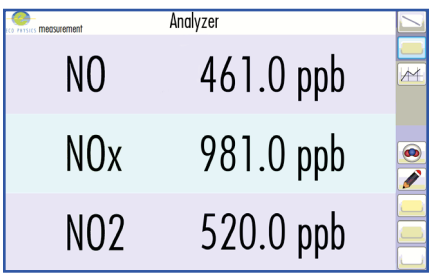
The nCLD AL is the next generation in single-channel high precision ambient air monitoring instrumentation. Unique in speed and reliability, the nCLD AL is modular designed and capable of sequentially measuring NO, NO_2 and NO_x. The analyzers expandable capabilities allow assessment of additional nitrogen based parameters. Its graphical user interface "GUI" also individually displays and connects to other instruments' data.

Measurement of:

- ***NO***
- ***NO_2***
- ***NO_x***

Flexible Ambient Air Monitoring

The nCLD AL 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 is a one-channel NO_x-detector based on a modular principle. The measurement ranges are individually adjustable, the parameters are NO, NO_2 and NO_x 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.



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

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. 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, control and maintenance of the nCLD AL, ensuring unsurpassed precision and reliability.

Compact, Modular and Intelligent!

The nCLD AL 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_x-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

Measurably better

SPECIFICATIONS

nCLD AL

Analyzer type	single chamber CLD with cooled PMT for sequential measurement of NO, NO_2, NO_x
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	30 sec (min. toggle interval)
Rise time (0 - 90%)	<1 sec (single-channel mode)
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_3 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 analyzer, power cable, FTDI-RS232-USB cable, USB-LAN adapter, HDMI adapter
Standard	nCLD AL	· **Y** - molybdenum converter · toggle mode for NO_2 measurement
Options	Analog output (External Box)	· USB-RS232 9pin connector · 0 - 10 V 4 - 20 mA into 500 Ω max.

*Depending on filter setting
Connectivity properties are country-specific
ECO PHYSICS reserves the right to change these specifications without notice.

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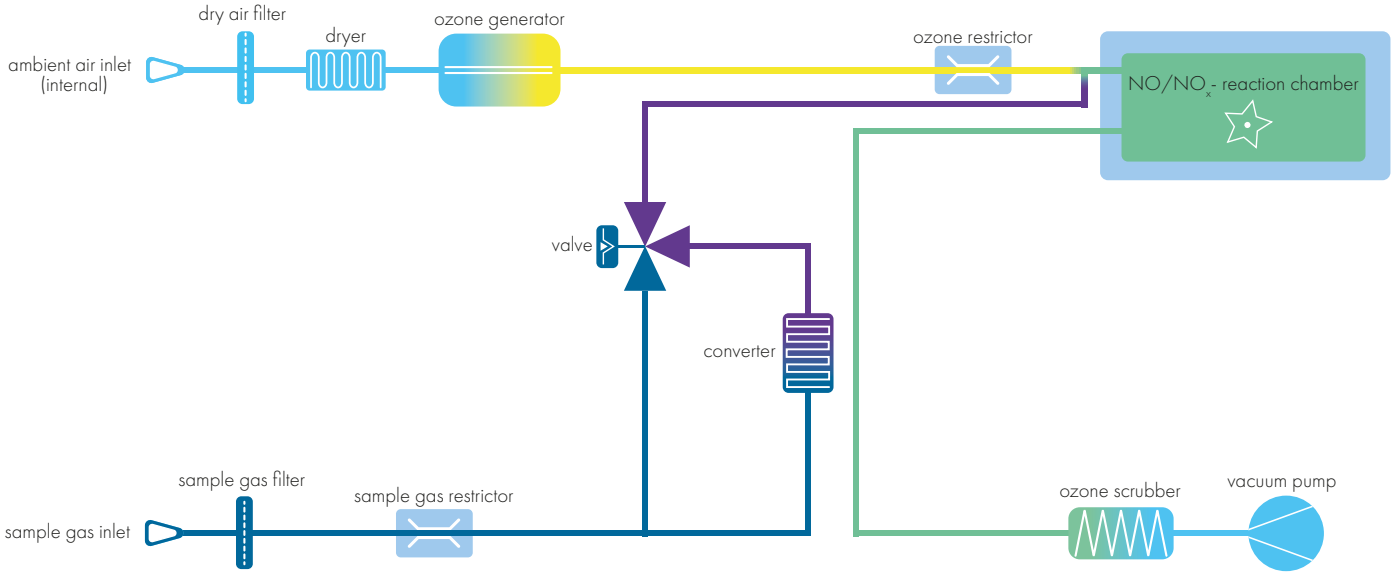
FLOW DIAGRAM



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