



ECO PHYSICS nCLD 899 Y

APPLICATION EXAMPLES

- Eddy covariance
- Background monitoring
- Flux measurements
- Long range transport
- Tropospheric research
- Certification and calibration



The nCLD 899 Y analyzer is the next generation in ultra high precision nitrogen oxide measurement. Unique in speed and reliability, the nCLD 899 Y is modular designed and capable of detecting lowest quantities of NO, NO₂, and NO_x in the range of parts per trillion. The new and intuitive graphical user interface also individually displays and connects to other instruments' data.

Measurement of:

- NO
- NO₂
- NO_x

Convenient and Highly Precise

The nCLD 899 Y fulfills the requirements of many research groups specializing in detection and monitoring smallest variations of N-containing compounds, such as NO, NO₂ and NO_x. The lag time depends on the settings of the pre chambers, that reduce zero drift and cross sensitivity. It can be reduced to an absolute minimum. The fully revised detector-block, the enhanced gas flow paths and the improved pressure as well as temperature independence of the nCLD Series lift overall stability and reliability to a new level. Calibration and adjustment of the unit runs quick and automatic with all necessary data, including calibration history and status reports, stored continuously.

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 899 Y, ensuring unsurpassed precision and reliability.

Compact, Modular and Intelligent!

The nCLD 899 Y 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).

- Four freely adaptable measurement ranges
- Remote operation, control and maintenance
- Pre chamber to offset cross sensitivity
- Expandable to CraNOx II

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

nCLD 899 Y measurement	
NO	223.32 ppb
NOx	243.82 ppb
NO2	20.50 ppb

Measurably better

SPECIFICATIONS

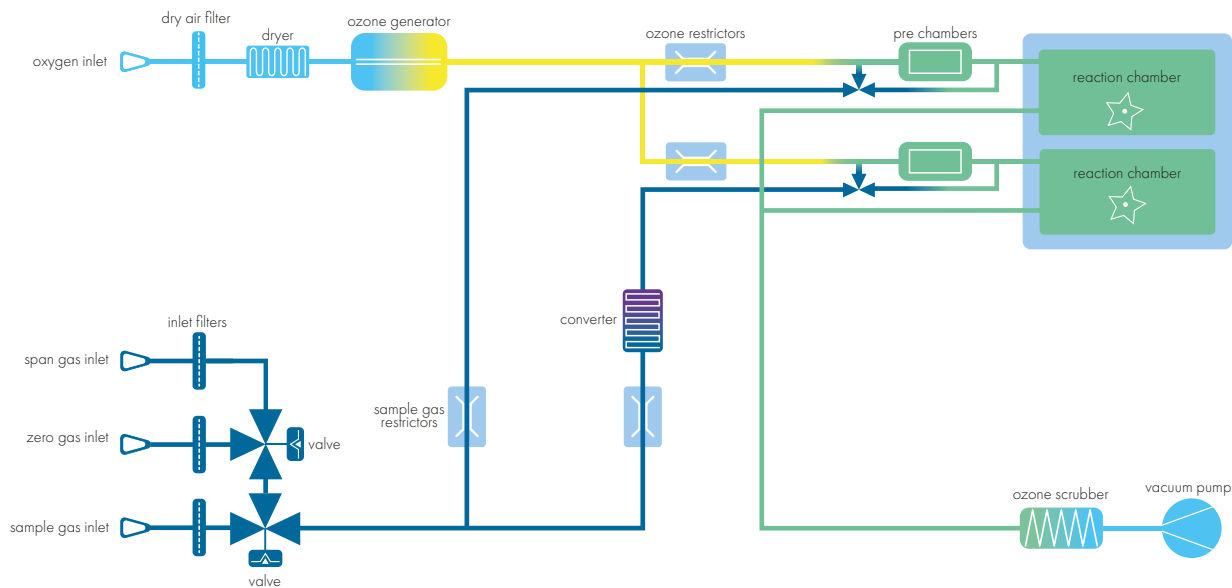
nCLD 899 Y

Analyzer type	dual chamber CLD with cooled PMT for measurement of NO, NO ₂ and NO _x	Supply voltage	100 - 240 V / 50 - 60 Hz
Measuring ranges	four freely selectable ranges from 1 ppb - 1000 ppb	Interface	USB(3x), HDMI, Bluetooth, RS232 (w/o 9pin connector), LAN, WLAN
Min. detectable concentration*	<0.025 ppb	Dimensions	height: 178 mm width: 450 mm with molding: 495 mm depth: 540 mm
Noise at zero point (1σ)*	<0.01 ppb	Weight	42 kg
Lag time	<3 sec	Delivery includes	nCLD 899 Y analyzer, power cable, FTDI-RS232-USB cable, USB-LAN adapter, HDMI adapter
Rise time (0 - 90%)	<1 sec	Standard	nCLD 899 Y · Y - molybdenum converter · p - pre chambers · V2 - two calibration valves for pressurized calibration (zero & span / 2-3 bar)
Temperature range	5 - 40 °C	Options	Analog output (External Box) · USB-RS232 9pin connector · 0 - 10 V · 4 - 20 mA into 500 Ω max.
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.		
O ₂ use for O ₃ generator	100 ml/min, pressurized 2-3 bar		
Power required	650 VA (incl. membrane pump and ozone scrubber)		

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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.



ECO PHYSICS

ECO PHYSICS AG · POB · CH-8635 DUERNTEN · TEL. +41 55 220 22 22 · E-MAIL INFO@ECOPHYSICS.COM

WWW.ECOPHYSICS.COM