



ECO PHYSICS nCLD 899 CY

APPLICATION EXAMPLES

Precise ambient measurements
Background ambient monitoring
Flux measurements
Long range transport
Tropospheric research
Certification and calibration



The nCLD 899 CY analyzer is the next generation in ultra high precision nitrogen oxide and NH_3 measurement. Unique in speed and reliability, the nCLD 899 CY is modular designed and capable of detecting lowest quantities of NO , NO_2 , NO_x , NO_x -amines and NH_3 in the range of parts per trillion. The new and intuitive graphical user interface "GUI" also individually displays and connects to other instruments' data.

Convenient and Highly Precise

The nCLD 899 CY fulfills the requirements of many research groups specializing in detection and monitoring smallest variations of N-containing compounds, such as NO , NO_2 , NO_x , NO_x -amines and NH_3 . NH_3 measurement is accomplished by a sequential detection of NO_x and NO_x -amines. The instruments two converters with distinctive characteristics, measuring the NO_x and the total NO_x -amines, enable the analyzer to determine the NH_3 . The pre chambers minimize zero drift and cross sensitivity. This makes it ideally suited for areas with excellent air quality. Calibration and adjustment of the unit runs quick and automatic, ensuring unsurpassed precision and reliability.

User Friendliness with "GUI"

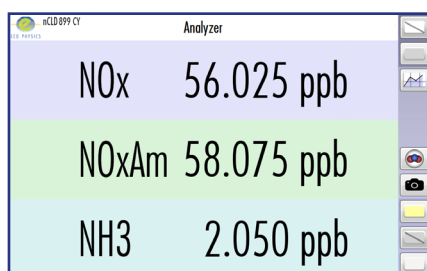
The new touch sensitive graphical user interface "GUI" enables the user to individually adjust the instrument operation and data management according to his/her needs and applications. The bright 8" monitor gives a clear overview and allows numerical and graphical display of values. Multiple digital in- and outputs guarantee a maximal connectivity and flexibility for the remote operation, control and maintenance of the nCLD 899 CY, providing high quality analysis.

Compact, Modular and Intelligent!

The nCLD 899 CY 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 conforms 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
- Choice between several types and numbers of converters
- Photolytic converter for NO_2 detection
- Expandable to $\text{Cr}(\text{NO}_x)_2$

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



Measurably better

SPECIFICATIONS

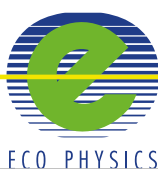
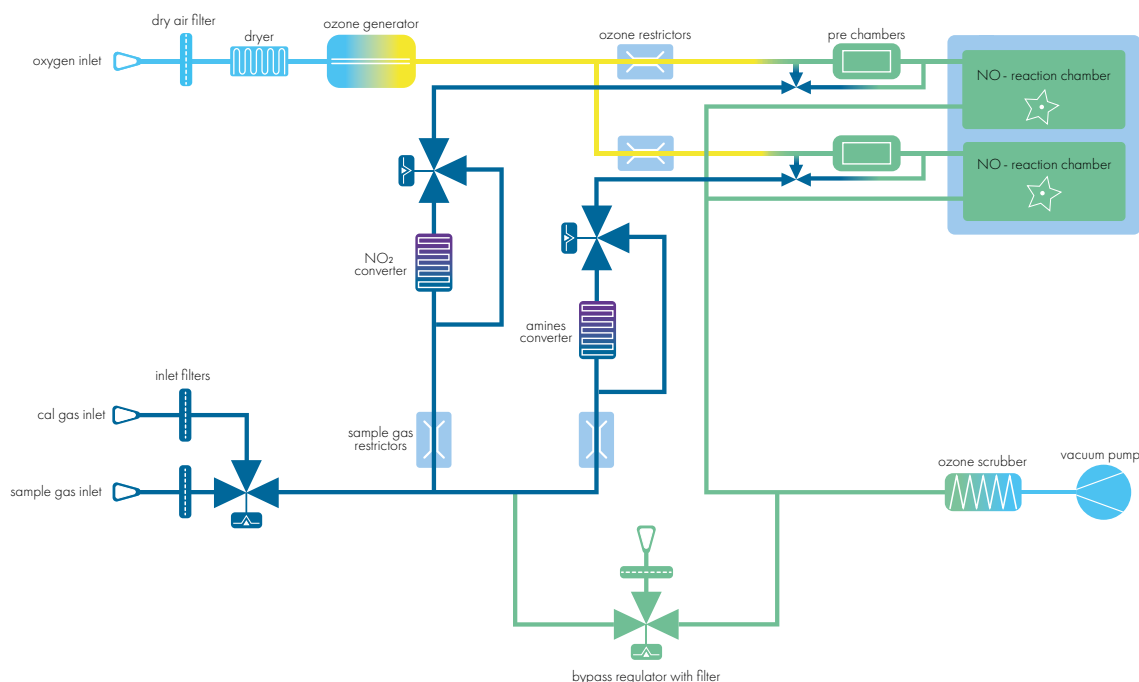
nCLD 899 CY

Measuring ranges	four freely selectable ranges from 1 ppb - 1000 ppb	Supply voltage	100–230 V/50–60 Hz
Min. detectable concentration*	<0.025 ppb	Interface	USB(2x), HDMI, Bluetooth, RS232 (w/o 9pin connector), LAN, WLAN
Noise at zero point (1σ)*	<0.01 ppb	Dimensions	height: 178 mm width: 450 mm with molding: 495 mm depth: 540 mm
Lag time	<3 sec	Weight	45 kg (99.2 lb.)
Rise time (0–90%)	<1 sec	Delivery includes	nCLD 899 CY analyzer, power cable, FTDI-RS232-USB cable, USB-LAN adapter, manual
Temperature range	5 - 40 °C	Standard	nCLD 899 CY
Humidity tolerance	5 - 95% rel. h (non-condensing, ambient air and sample gas)	Options	PLOC Analog output (External Box)
Sample flow rate	0.7 l/min		pre chambers catalytic converter molybdenum converter
Dry air flow rate	230ml/min		
Input pressure	ambient		
Converters	catalytic, molybdenum		
Dry air use for O ₃ generator	200 ml/min		
Power required	500 VA (incl. membrane pump and ozone scrubber)		

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FLOW DIAGRAM

* depending on filter setting
ECO PHYSICS reserves the right to change these specifications without notice.



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

sales@ecophysics-us.com . www.ecophysics-us.com