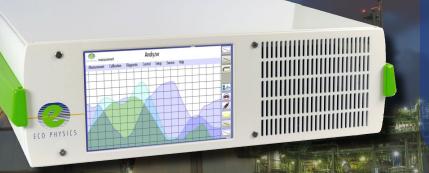
ECO PHYSICS nCLD 824 MMdr



The nCLD 824 MMdr analyzer is the next generation in two-channel high precision nitrogen oxide measurement. Unique in speed and reliability, the nCLD 824 MMdr is modular designed and capable of simultaneously measuring NO_x from two different gas sources with pressure fluctuations. The new and intuitive graphical user interface "GUI" also individually displays and connects to other instruments' data.

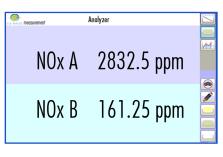
APPLICATION EXAMPLES

Catalyst testing Manufacturers of gas turbines Certification and calibration DeNOx plants Refining of fuels and lubricants Burners and Boilers Research and development

Two Instead of One

The nCLD 824 MMdr includes everything that is needed for simultaneously measuring NO_v in two different gas samples. Dual sample gas inlet combined with two metal converters allows the user to measure two different sources simultaneously, enabling comparison of the samples. The integrated electromechanical bypass system balances out pressure variations occurring in the sample flow and the optionally available hot tubing enables the instrument to analyze hot and moist gas sources. Calibration and adjustment of the unit runs quick and automatically with all necessary data 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 for your remote operation, control and maintenance of the nCLD 824 MMdr, ensuring unsurpassed precision and reliability.

Compact, Modular and Intelligent!

The nCLD 824 MMdr 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 stationary source emissions (EN 14792).

- Rapid system integration and rack mounting
- Compact and modular design
- Virtually maintenance free even in continuous operation
- Four freely selectable measuring ranges (with dual inlet: two per channel)
- Choice between different types and numbers of converters

Measurably better

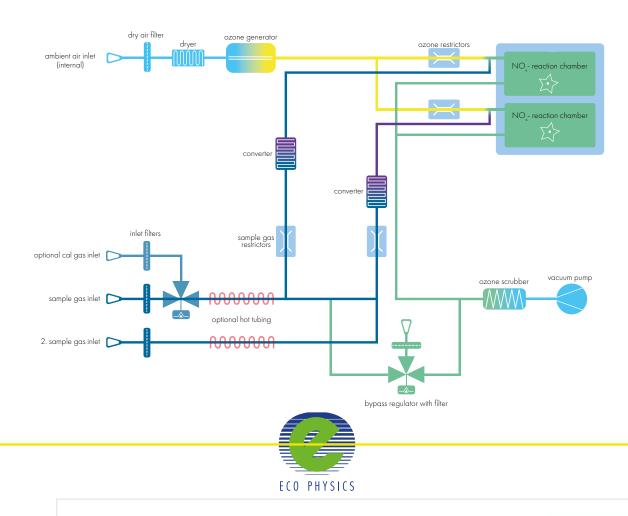
SPECIFICATIONS

nCLD 824 MMdr

Measuring ranges	channel 1: two freely selectable ranges from 5 ppm - 5000 ppm	Power required	400 VA (incl. membrane pump and ozone scrubber)
	channel 2: two freely selectable ranges from 0.5 ppm - 500 ppm	Supply voltage	100-230 V/50-60 Hz
Min. detectable concentration*	channel 1: 0.25 ppm channel 2: 0.025 ppm	Interface	USB(2x), HDMI, Bluetooth, RS232 (w/o 9pin connector), LAN, WLAN
Noise at zero point (1 0)*	channel 1: 0.125 ppm channel 2: 0.0125 ppm	Dimensions	height: 133 mm (5½") width: 450 mm (19") with molding: 495 mm depth: 540 mm (21.2")
Lag time	<l sec<="" td=""><td></td></l>		
Rise time (0–90%)	<] sec	Weight	23 kg (51 lb)
Temperature range	5 - 40 °C	5	
Humidity tolerance	5 - 95% rel. h (non-condensing, ambient air and sample gas)	Delivery includes	nCLD 824 MMdr analyzer, power cable, FTDI-RS232-USB cable, USB-LAN adapter, manual
Sample flow rate	1.2 l/min (0.11/min without pressure regulation)	Standard nCLD 824 MMdr	dual channel NO _x /NO _x w/metal converters and electro-mechanical pressure regulation
	()	Options	 dual channel NO_x/NO_x w/steel converters hot tubing
Input pressure	600-1200 mbar abs. (without pressure reg. to be externally stabilized within ± 3mbar)	Analog output (External Box)	· USB-RS232 9pin connector · 0 - 10 V/4 - 20 mA into 500 Ω max.
Dry air use for $O_{_3}$ generator	internally generated (no external supply gas required)		

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