ECO PHYSICS nCLD 811 CM

APPLICATION EXAMPLES

- Emissions test benches
- Testing of burner systems
- Catalyst development
- Engine test cells
- Car production
- Exhaust analysis

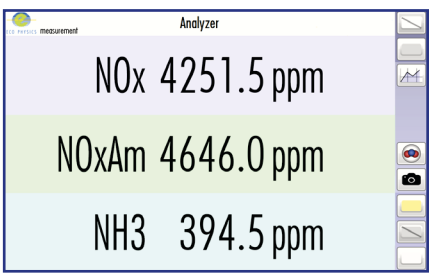
The nCLD 811 CM is the next generation in two-channel emissions monitoring instrumentation. Unique in speed and reliability, the nCLD 811 CM is modular designed and allows the continuous analysis of NO, NO_2 , NO_x , NH_3 and NO_x-Amines in raw exhaust gasses and other samples with NO_x concentrations ranging from several thousand ppm down to a ppb. Its graphical user interface also individually displays and connects to other instruments' data.

Measurement of:

- **NO**
- **NO_2**
- **NO_x**
- **NH_3**
- **NO_x-Amines**

Straight from the Source

The nCLD 811 CM fulfills the high requirements of the automotive industry when it comes to generating reproducible and reliable NO_x and ammonia data. Furthermore, it is also very well suited for equally difficult measurement tasks. With its heated inlet and automated pressure control, the analyzer is able to handle rough samples, such as raw exhaust gas. The nCLD 811 CM analyzer is optimized for the measurement of N-containing compounds, such as NO, NO_2, NH_3, NMP (N-Methyl-2-pyrrolidone) and amines. This is the result of an extended range of capabilities designed in this state of the art monitor, that is virtually maintenance free.



Graphical user interface for individual analyzer operation and data management

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 for your remote operation, control and maintenance of the nCLD 811 CM, ensuring unsurpassed precision and reliability. Calibration of the unit runs quick and automatically with all necessary data available anywhere and at any time.

Compact, Modular and Intelligent!

The nCLD 811 CM 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.

- Compact design without any additional space required
- Minimized CO_2 and H_2O quenching
- Four freely selectable measurement ranges
- Touch screen operation or remote operation

Measurably better

SPECIFICATIONS

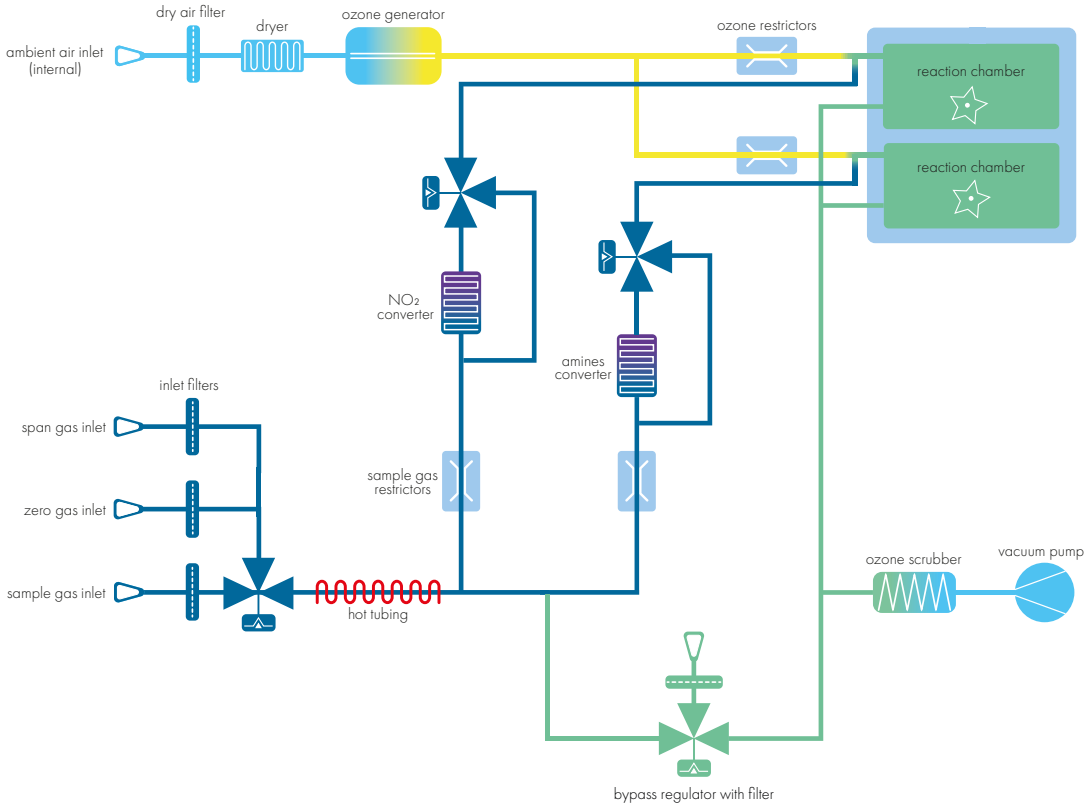
nCLD 811 CM

Analyzer type	dual chamber CLD with cooled PMT for measurement of NO, NO_2, NO_x, NH_3 and NO_x-Amines
Measuring ranges	four freely selectable ranges from 1 ppm - 10'000 ppm
*Min. detectable concentration**	1 ppb
*Noise at zero point (1σ)**	0.5 ppb
Lag time	<3 sec
Rise time (0 - 90%)	<1 sec
Temperature range	5 - 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 -1'200 mbar abs.
Dry air use for O_3 generator	internally generated (no external supply gas required)
Power required	650 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: 178 mm width: 450 mm with molding: 495 mm depth: 540 mm
Weight		48 kg
Delivery includes		nCLD 811 CM analyzer, power cable, FTDI-RS232-USB cable, USB-LAN adapter, HDMI adapter
Standard	nCLD 811 CM	· **C** - catalytic converter · **M** - metal converter · **h** - hot tubing · **r** - electro-mechanical pressure regulation · **V2** - two calibration valves for pressurized calibration (zero & span / 2-3 bar)
Options	Analog output (External Box)	· **V8** - valve manifold · 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.

FLOW DIAGRAM



ECO PHYSICS

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