## ECO PHYSICS nCLD 88 O<sub>3</sub>

#### **APPLICATION EXAMPLES**

- · Ambient air monitoring
- Tropospheric research
- Aircraft measurement
- Оз eddy covariance measurement

The nCLD 88 O<sub>3</sub> offers a fast and precise measurement of O<sub>3</sub>. The extremely high sensitivity and fast response time of the nCLD 88 O<sub>3</sub> allows the detection of concentrations in the range of parts per trillion and is perfectly suited for eddy covariance measurements. Its new and intuitive user interface also individually displays and connects to other instrument's data.

#### Measurement of:

• 0<sub>3</sub>

When precision counts

The nCLD 88 O<sub>3</sub> is the "Gold Standard" in precision and speed for tropospheric research and sophisticated applications. Even smallest variations of Ozone are detected and monitored. In contrast to the widely used UV absorption technique, the nCLD 88 O<sub>3</sub> offers a data sampling speed of up to 10 Hz.

In particular for Eddy Covaraince measurements this analyzer matches the NO data by using the same principle in reverse. The high sampling rate is needed for aircraft measurement as well. Optimized sample flows and electronic filtering enable the adaptation to various tropospheric and research application.

#### **User Friendliness**

The new touch sensitive interface enables

Graphical user interface for individual analyzer operation and data management



individual adjustment of instrument operation and data management according to his/ her needs and applications. All necessary data is continuously and available. The bright seven inch 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 and maintenance of the nCLD 88 O<sub>3</sub>.

#### Compact, Modular and Intelligent!

The nCLD 88 O<sub>3</sub> is a versatile unit. Its modular configuration makes it adaptable to your application needs. If required, it can be combined with an nCLD 899 Y for additional NO measurement.

Maintenance simply means the annual replacement of filters and membranes, besides the consumables required by your sample conditioning.

Each component is equipped with its own PCB and directly communicates via BUS with the mainframe. The values are stored inside the internal data logger and can be transferred via multiple digital, or optional analog outputs.

- Compact design
- Fast and reliable ozone data
- Four freely selectable measuring ranges

**Measurably better** 

## **SPECIFICATIONS**

# **nCLD 88 O**<sub>3</sub>

Analyzer type	single chamber nCLD for measurement of Q.	Supply voltage		100 - 240 V/50 - 60 Hz
Measuring ranges	four freely selectable ranges from 5 ppb - 5'000 ppb	Power required		400 VA (incl. internal membrane pump
		Interface		USB(3x), HDMI, Bluetooth,
Min. detectable concentration*	0.05 ррb			RS232 (w/o 9pin connector), LAN, WLAN
Noise at zero point (1 $\sigma$ )*	<0.025 ppb	Dimensions		height: 133 mm (5¼ ″) width: 450 mm (19 ″) with molding: 495 mm depth: 540 mm (21.2 ″)
Lag time	<1 sec			
Rise time (0 - 90%)	<] sec			
		Weight		24 kg
Temperature range	5 - 40 °C	Delivery includes		nCLD 88 O3 analyzer, power cable, FTDI-RS232-USB cable, USB-LAN adapter
Humidity tolerance	5 - 95% rel. h (non-condensing, ambient air and sample gas)			
		Options	Analog output	· USB-RS232 9pin connector · O - 10 V,
Sample flow rate	1 l/min		(External Box)	4 - 20 mA into 500 Ω max.
Input pressure	Ambient			
NO gas supply	1% NO in N2 @ 35 ml/min			
NO gas supply	1-3 bar			
Dry air use for rinsing	internally generated (no external supply gas required)			

### **FLOW DIAGRAM**

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



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