

# ECO PHYSICS CLD 899 Y

Application examples



Precise ambient measurements

Tropospheric research

Long range transport

Background ambient monitoring

Flux measurements in rural areas

The CLD 899 Y nitrogen oxide analyzer is unique in its precision. It allows with the internal molybdenum converter or the external PLC 860 (CraNOx II system) the simultaneous measurement of NO and NO<sub>2</sub> concentrations even in the range of low parts per trillion!



Monitoring of ambient air quality.

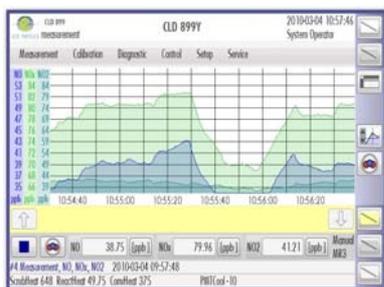
## When decimals are decisive.

The CLD 899 Y fulfills the requirements of many research groups specializing in detecting and monitoring smallest variations of NO, NO<sub>x</sub> and NO<sub>2</sub> concentrations. The instrument is especially designed for high altitude application. The lag time depends on the settings of the pre-chambers and can be reduced to seconds. The pre-chamber minimizes zero drift and cross sensitivity by other gases. This makes it ideally suited for ambient air monitoring.

## Compact and modular design.

The CLD 899 Y is the most comprehensive unit of its class. Thanks to the totally modular layout and the rich variety of options this analyzer is designed for a multitude of applications. The use of first-rate components guarantees virtually service-free operation. Maintenance simply means annual replacement of filters and membranes besides the consumables required by special sampling conditions.

- Compact design without any additional space required
- Photolytic converter for NO<sub>2</sub> detection
- Pre-chamber to offset cross sensitivity
- Four freely selectable measurement ranges
- Operation and control via touch screen



Clearly structured and full graphical color display informs the user about all relevant data.

For specific NO<sub>2</sub> measurements the molybdenum converter may be replaced by the optionally available photolytic converter (PLOC).

This would upgrade the device to a complete CraNO<sub>x</sub> II system, inclusive ozone analyzer and calibrator.

## User friendliness.

The development of an ECO PHYSICS analyzer always requires full user comfort. The user can adapt the operation according to his needs by selection of predefined settings.

## Unique graphical interface!

The new designed graphical user interface enables easy access to various functions by touch screen technology. Integrated user management and configuration menus guarantee maximum flexibility for custom specific needs. Warnings and error messages, as well as user guidance, are displayed for easy identification. Online data are displayed numerical and graphical. The operator may use standard settings or user specific options like zoom functions. A standard feature is the data logger function for up to one year storage capability.

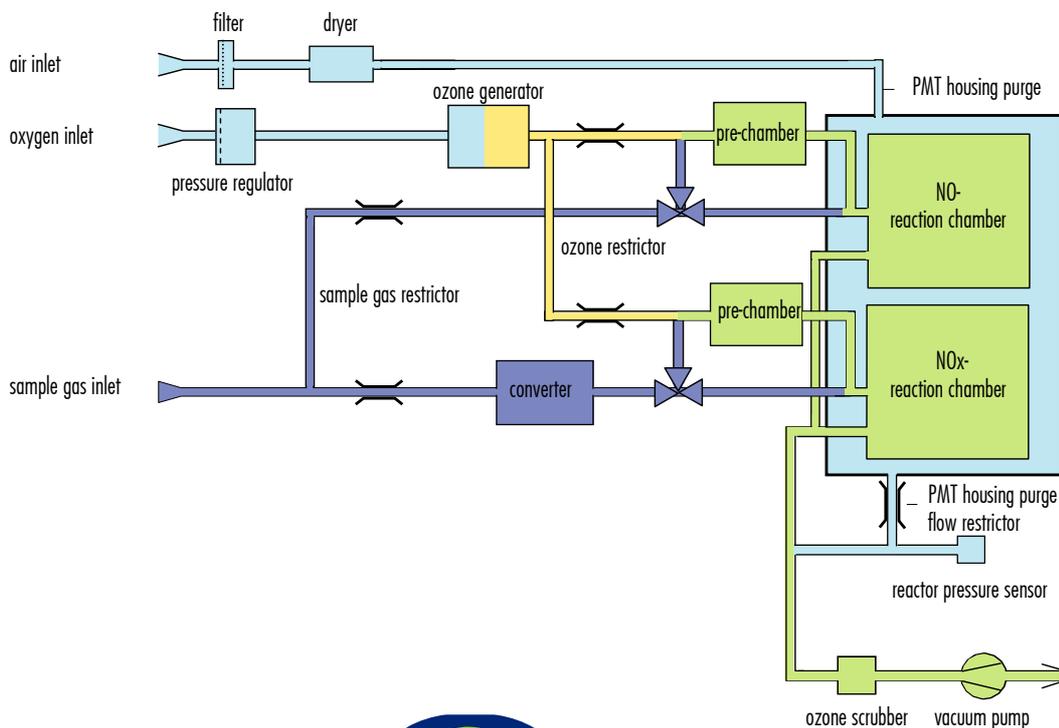
# CLD 899 Y

## Specifications

Measuring ranges	four freely selectable ranges from 1 - 1000 ppb	Analog output	4-20 mA into 500 Ω max. 0-1 V; 0-10 V
Min. detectable concentration	<0.025 ppb*	Dimensions	height: 178 mm (7") width: 450 mm (19") with molding: 495 mm depth: 650 mm
Noise at zero point (1 σ)	<0.01 ppb*	Weight	45 kg
Lag time	< 3 sec	Delivery includes	CLD 899 Y analyzer, power cable, operator's manual
Rise time (0-90%)	<1 sec	Standard	CLD 899 Y pre-chambers molybdenum converter
Temperature range	5-40 °C	Options	PLOC CraNOx II system
Humidity tolerance	5-95% rel. h (non-condensing, ambient air and sample gas)	* depending on filter setting	
Sample flow rate	0.7 l/min	ECO PHYSICS reserves the right to change these specifications without notice.	
Input pressure	ambient		
Dry air flow rate	230 ml/min		
Oxygen use for O <sub>3</sub> generator	200 ml/min		
Power required	500 VA (incl. membrane pump and ozone scrubber)		
Supply voltage	100-230 V/50-60 Hz		
Interfaces	RS 232, LAN, keyboard, mouse, video out		

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## Flow diagram



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