# ECO PHYSICS nCLD 899 Y


## APPLICATION EXAMPLES

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

**The nCLD 899 Y analyzer is the next generation in ultra high precision nitrogen oxide measurement. Unique in speed and reliability, the nCLD 899 Y is modular designed and capable of detecting lowest quantities of NO, $NO_X$ and $NO_2$ 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 Y fulfills the requirements of many research groups specializing in detection and monitoring smallest variations of N-containing compounds, such as NO, $NO_X$ and $NO_2$. The analyzer is especially designed to include high altitude application. The lag time depends on the settings of the pre chambers and can be reduced to seconds. Calibration and adjustment of the unit runs quick and automatic. All Data, including cal. history, instrument status and warning conditions is continuously stored. The pre chambers minimize zero drift and cross sensitivity. For specific $NO_2$ measurements, the molybdenum converter may be replaced by the photolytic converter (PLOC).


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 and flexibility for the remote operation, control and maintenance of the nCLD 899 Y, ensuring unsurpassed precision and reliability.

### Compact, Modular and Intelligent!

The nCLD 899 Y 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 CraNOx II

# SPECIFICATIONS

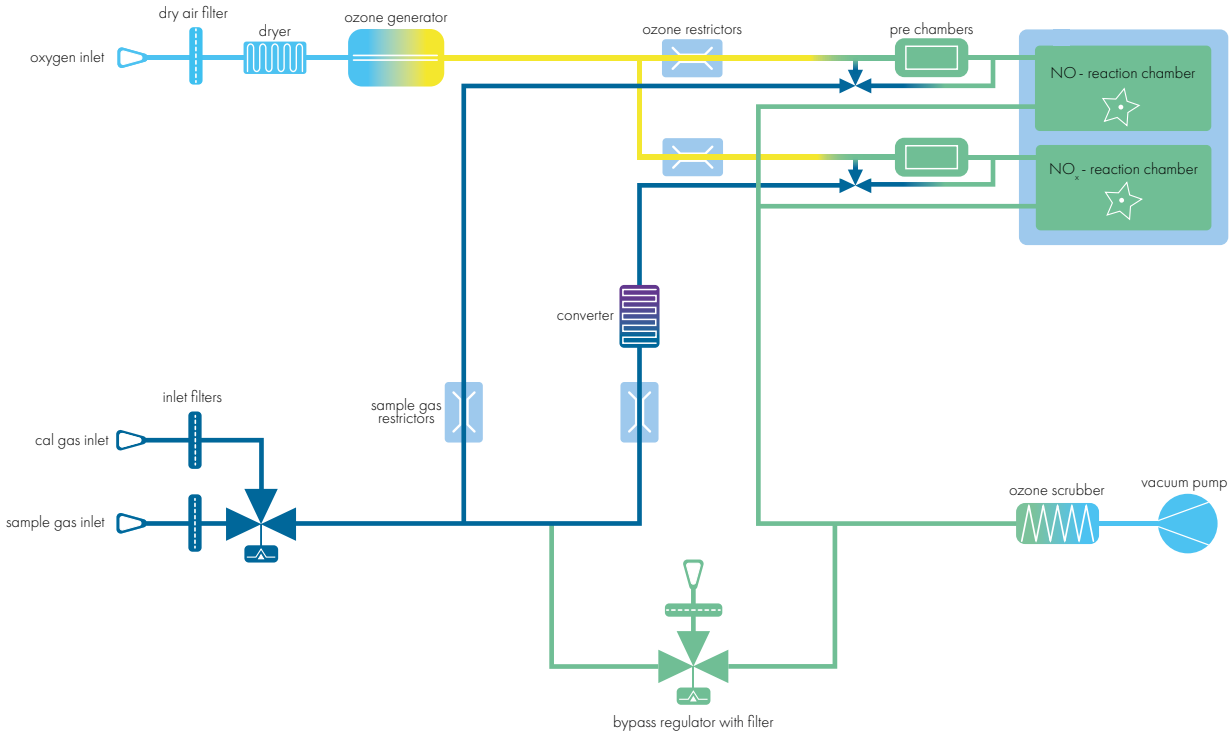
# nCLD 899 Y

| | |
|---|---|
| *Measuring ranges* | four freely selectable ranges from 1 ppb - 1000 ppb |
| *Min. detectable concentration** | <0.025 ppb |
| *Noise at zero point (1σ )** | <0.01 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* | 0.7 l/min |
| *Dry air flow rate* | 230ml/min |
| *Input pressure* | ambient |
| *Converter* | molybdenum |
| *Dry air use for $O_3$ generator* | 200 ml/min |
| *Power required* | 500 VA (incl. membrane pump and ozone scrubber) |

| | | |
|---|---|---|
| *Supply voltage* | | 100–230 V/50–60 Hz |
| *Interface* | | USB(2x), HDMI, Bluetooth, RS232 (w/o 9pin connector), LAN, WLAN |
| *Dimensions* | | height: 178 mm<br>width: 450 mm<br>with molding: 495 mm<br>depth: 540 mm |
| *Weight* | | 45 kg (99.2 lb.) |
| *Delivery includes* | | nCLD 899 Y analyzer, power cable, FTDI-RS232-USB cable, USB-LAN adapter, manual |
| *Standard* | nCLD 899 Y | pre chambers<br>molybdenum converter |
| *Options* | PLOC | · CraNOx II System<br>· USB-RS232 9pin connector |
| | Analog output (External Box) | · 0 - 10 V/4 - 20 mA into 500 Ωmax. |

# FLOW DIAGRAM

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

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