

# CLD 780 TR

The NO analyzer for the scientific research of the free troposphere. Specially designed to rapidly detect very low NO/NO<sub>x</sub> concentration (ppt), as demanded for aircraft and vertical flux measurements.

## SPECIFICATIONS

### Performance

Sensitivity:	50 ppt in 3 sec 10 ppt in 60 sec
Noise at zero (1σ):	< 25 ppt in 3 sec
Detection limit:	3 ppt
Integration interval:	selectable: 0.1...999
Rise time (0-95%):	< 1 sec
Zero drift:	none (prechamber)
Linearity deviation:	< 1 % fullscale
Interferences:	HC's, NH <sub>3</sub> , NO, none

### Operating specifications

Ranges:	5, 10, 50, 100, 500 ppb
Outputs:	serial: RS232 analog: 1V, 10V, at > 500 kΩ 4-20 mA at < 600 Ω
Temperature range:	5-50 °C
Humidity tolerance:	5-95% rel. humidity
Gas flows:	Sample: 3 l/min NPT O <sub>2</sub> : 330 ml/min NPT Dry air: < 50 ml/min NPT
Reaction chamber pressure:	14 mbar
PMT cooling temp.:	< -15 °C
Sample inlet temp.:	60 °C regulated
Operating voltage:	28 VDC +/- 1 VDC optional: 24 VDC +/- 1 %
Power requirements:	200 Watt max.

### Delivery includes

NO analyzer with all elec. cables, two silicagel cartridges, excluding vacuum pump, vacuum tubing and ozone destroyer.



### Physical characteristics

Dimensions:	Casing:	Width: 440 Height: 255 Depth: 420
(mm)	Front:	Width: 483 Height: 264 Depth: 4
Weight:		35
(kg)		
Material:		standard: Aluminium optional: Aerospace aluminium
Connections:		all connections made on front panel
		28 VDC 1 x RS232 3 x Analog out Connection for PLC O <sub>2</sub> inlet (1/4" Swagelok) Dry air inlet (1/4" Swagelok) Sample inlet (1/4" Swagelok) Vacuum outlet (DN 16 ISO KF)

### Options

Inlet Pressure Regulation System (By pass Concept)	
Increased sensitivity:	25 ppt in 3 sec 5 ppt in 60 sec
NO <sub>x</sub> Converter:	PLC 762 Photolytic Converter

ECO PHYSICS reserves the right to change these specifications without notice (2005).