

## ProCeas® Air

N<sub>2</sub>O, CH<sub>4</sub>, CO<sub>2</sub>, NH<sub>3</sub> and H<sub>2</sub>O, OFCEAS Laser Analyzer

- Sensitivity down to ppb
- Continuous measurement over the 5 gases
- Fast response time



## FEATURES

- Continuous measurement
- Multi components
- High resolution laser technology
- Patented OFCEAS IR laser technology
- No optical moving parts
- Patented Low Pressure Sampling System
- No instrument air consumption
- Maintenance: yearly

## BENEFITS

- Measurement without interferences regardless of the matrix
- High sensitivity
- Self-calibrating system (no span gases required)
- Very fast response time
- Ultra-precise measurement
- Negligible drift
- High availability of the system
- No water condensation from sampling point to analyzer due to Low Pressure Sampling

## TECHNICAL DATA

Analyzer (1/2)	
Technique	OFCEAS
Power supply	110 ... 230 VAC, 50 ... 60 Hz
Power consumption	150 W (max), 80 W (average)
Dimensions	Rack 19", 4U
Weight	20 kg
Data outputs	Ethernet, ModBus (TCP/IP, RS), analog, USB

Analyzer (2/2)	
Fittings	1/4" or OD6
Pumping system	External Closed loop (optional)
Sample conditions	-40 ... 50 °C (temperature) <99% RH non condensing Atm +/- 100 mbar (pressure) 0.2 slm, 0.33 slm (for NH <sub>3</sub> )
Ambient conditions	10 ... 40 °C (temperature) <99% RH non condensing

Performances specifications (N <sub>2</sub> O, CH <sub>4</sub> , CO <sub>2</sub> , NH <sub>3</sub> and H <sub>2</sub> O, in Ambient Air)						
Gas		N <sub>2</sub> O	CH <sub>4</sub>	CO <sub>2</sub>	NH <sub>3</sub>	H <sub>2</sub> O
Lower detection limit (3σ, 300 sec)		<6 ppb	<6 ppb	<500 ppb	<6 ppb	<360 ppm
Precision (1σ)	1 sec	5 ppb + 0.1% of reading	5 ppb + 0.1% of reading	300 ppb + 0.1% of reading	<5 ppb	<300 ppm
	10 sec	4 ppb + 0.1% of reading	4 ppb + 0.1% of reading	1 ppb + 0.1% of reading	<4 ppb	<200 ppm
	300 sec	2 ppb + 0.1% of reading	2 ppb + 0.1% of reading	180 ppb + 0.1% of reading	<2 ppb	<120 ppm
Measurement interval		1 sec	1 sec	1 sec	1 sec	1 sec
Response time/fall time (10 ... 90%)		<2 sec	<2 sec	<2 sec	<30 sec	<30 sec
Measurement range	Guaranteed Operational	0.1 ... 200 ppm 0 ... 400 ppm	1 ... 15 ppm 0 ... 20 ppm	300 ... 5 000 ppm 0 ... 2% vol	0 ... 1 000 ppb 0 ... 10 ppm	0 ... 3% vol 0 ... 5% vol
Cross-sensitivity on N <sub>2</sub> O	No cross-sensitivity with CO <sub>2</sub> (up to 5% vol), CH <sub>4</sub> (up to 500 ppm), NH <sub>3</sub> (up to 10 ppm), C <sub>2</sub> H <sub>6</sub> (up to 200 ppm), C <sub>2</sub> H <sub>4</sub> (up to 50 ppm) and C <sub>2</sub> H <sub>2</sub> (up to 20 ppm)					