

ProCeas® Air

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 ₃)
Ambient conditions	10 ... 40 °C (temperature) < 99 % RH non condensing

Performances in Air			
Gas	Standard ranges	LoD*	Response time*
CO	0 ... 50 ppb; 0 ... 30 ppm	1 ppb	<2 sec
CO ₂	0 ... 300 ppm; 0 ... 2% vol	<0.5 ppm	<2 sec
COS	0 ... 50 ppb; 0 ... 10 ppm	1 ppb	<2 sec
CH ₄	0 ... 1 ppm; 0 ... 50 ppm	1 ppb	<2 sec
CHOH	0 ... 1 ppm; 0 ... 100 ppm	1 ppb	<10 sec
HF	0 ... 100 ppb; 0 ... 1 ppm	0.05 ppb	<90 sec

Performances in Air			
Gas	Standard ranges	LoD*	Response time*
HCl	0 ... 100 ppb; 0 ... 1 ppm	0.05 ppb	<30 sec
NH ₃	0 ... 300 ppb; 0 ... 5 ppm	0.1 ppb	<30 sec
H ₂ S	0 ... 300 ppb; 0 ... 5 ppm	2 ppb**	<2 sec
N ₂ O	0 ... 300 ppb; 0 ... 250 ppm	2 ppb	<2 sec
H ₂ O	0 ... 5% vol	360 ppm	<30 sec
Linearity: <1% range, R ² >0,999 Repeatability: 3*LoD or +/-0,5% relative			

* Response time: 10% to 90%

* LoD: 3σ over a period of 60 sec, σ: Standard deviation

** For H₂S, LoD: 1σ, 5 min