DURAG GROUP

ProCeas® Air OFCEAS laser analyzer

- Sensitivity down to ppb
- Continuous measurement
- 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 compressed air consumption
- Maintenance: yearly

Benefits

- Measurement without interference 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		

Performance in air					
Gas	Standard ranges	LoD*	Response time*		
со	0 50 ppb; 0 30 ppm	1 ppb	<2 s		
CO ₂	0 300 ppm; 0 2% vol	<0.5 ppm	<2 s		
cos	0 50 ppb; 0 10 ppm	1 ppb	<2 s		
CH ₄	0 1 ppm; 0 50 ppm	1 ppb	<2 s		
снон	0 1 ppm; 0 100 ppm	1 ppb	<10 s		
HF	0 100 ppb; 0 1 ppm	0.05 ppb	<90 s		

Performance in air					
Gas	Standard ranges	LoD*	Response time*		
HCI	0 100 ppb; 0 1 ppm	0.05 ppb	<30 s		
NНз	0 300 ppb; 0 5 ppm	0.1 ppb	<30 s		
H₂S	0 300 ppb; 0 5 ppm	2 ppb**	<2 s		
N ₂ O	0 300 ppb; 0 250 ppm	2 ppb	<2 s		
H ₂ O	0 5% vol	360 ppm	<30 s		
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 s, σ: standard deviation
 For H₂S, LoD: 1σ, 5 min