

Overview of technical data

Measurement method	Electrochemical Sensors (EC)			Chemiluminescence (CLD)			Photoacoustic Spectroscopy (PAS)		
APPLICATION	Quasi-continuous measurements (air purge after >120 minutes required; measurement > 48 h not recommended)			Continuous measurements also possible in mobile use with monitoring (filters, gas process etc.)			Continuous measurements also possible in mobile use with monitoring (filters, gas process etc.)		
MAXIMUM NUMBER OF GAS COMPONENTS	6			2 (incl. converter)			1		
GAS COMPONENTS For a given gas component, one measurement method only can be chosen	Measurement Range	Resolution	Accuracy	Measurement Range	Resolution	Accuracy	Measurement Range	Resolution	Accuracy
Oxygen O ₂	0...21 %	0,01 vol. %	± 0,3 vol. %						
Carbon Monoxide CO	0...10.000 ppm ⁽²⁾	1 ppm	± 20 ppm resp. 5% of measurement value ⁽¹⁾						
	0...63.000 ppm	5 ppm	± 100 ppm resp. 10% of measurement value ⁽¹⁾						
Carbon Dioxide CO ₂	Calculation via O ₂ -value								
Nitrogen Monoxide NO	0...5.000 ppm	1 ppm	± 5 ppm resp. 5% of measurement value ⁽¹⁾	0-1.000 ppm	0,1 ppm	± 2% of full scale			
	0...500 ppm	0,1 ppm	± 2 ppm resp. 5% of measurement value ⁽¹⁾						
Nitrogen Dioxide NO ₂	0...1.000 ppm	1 ppm	± 5 ppm resp. 5% of measurement value ⁽¹⁾	0-1.000 ppm ⁽⁴⁾	0,1 ppm ⁽⁴⁾	± 2% of full scale	0-200 ppm	0,1 ppm	± 2% of full scale
	0...100 ppm	0,1 ppm	± 5 ppm resp. 5% of measurement value ⁽¹⁾						
Nitrogen Oxides NO _x	calculated out of NO/NO ₂ Measurement			via converter: Transformation of NO ₂ to NO + measurement via CLD: No original NO _x measurement possible Recommendation: Combination of NO measurement (CLD) and NO ₂ measurement (PAS)			In combination with CLD – perfect for an exact and continuous NO _x measurement		
Sulphur Dioxide SO ₂	0...5.000 ppm	1 ppm	± 10 ppm resp. 5% of measurement value ⁽¹⁾						
Hydrogen H ₂	0...20.000 ppm	1 ppm	±100 ppm resp. 5% of measurement value ⁽¹⁾						
Hydrogen Sulphide H ₂ S	0...1.000 ppm	1 ppm	±10 ppm resp. 5% of measurement value ⁽¹⁾						
Hydrocarbons C _x H _y (calibrated on CH ₄)									
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Hydrocarbons C _x H _y (calibrated on C ₂ H ₄)									

(1) Higher value prevails
(2) H₂-compensated; safety shut-off at 4.000 ppm

(3) Because of solubility of these gas components a measurement is just possible under dry conditions

	Non dispersive Infra-red Technology (NDIR) ADVANCED			Non dispersive Infra-red Technology (NDIR) STANDARD			Catalytic Measurement (Pellistor)			Non dispersive Ultraviolet Technology (NDUV)		
	Continuous measurements also possible in mobile use with monitoring (filters, gas process etc.)			Quasi-continuous measurements (air purge after > 60 minutes required; measurement > 48 h not recommended)			Quasi-continuous measurements (air purge after > 60 minutes required; measurement > 48h not recommended)			Continuous measurements also possible in mobile use with monitoring (filters, gas process etc.)		
	max. 3 (also possible in connection with NDIR-STANDARD components)			3 (also possible in connection with NDIR-ADVANCED-components)			1			3 (2-channel with NO _x / SO ₂ or 3-channel with NO / NO ₂ / SO ₂)		
	Measurement Range	Resolution	Accuracy	Measurement Range	Resolution	Accuracy	Measurement Range	Resolution	Accuracy	Measurement Range	Resolution	Accuracy
	0...1.000 ppm ⁽⁵⁾	1 ppm	± 2% of full scale	0...63.000 ppm	10 ppm	± 200 ppm resp. 3% of measurement value ⁽¹⁾						
	0...20 vol. %	0,01 vol. %	± 2% of full scale	0...20 vol. %	0,01 vol. %	± 0,3 vol. % resp. 3% of measurement value ⁽¹⁾						
										0...300 (2.000) ppm	0,1 ppm	± 3 ppm (1 % of measurement value)
										0...300 (2.000) ppm	0,1 ppm	± 3 ppm (1 % of measurement value)
										0...100 ppm	0,1 ppm	± 2 ppm resp. 2% of measurement value ⁽¹⁾
	0...1.000 ppm ⁽⁵⁾	1 ppm	± 2% of full scale							0...300 (2.000) ppm	0,1 ppm	± 3 ppm (1 % of measurement value)
										0...100 ppm	0,1 ppm	± 2 ppm resp. 2% of measurement value ⁽¹⁾
									0...4 vol. %	0,01 vol. %	upon request	
							0...30.000 ppm	10 ppm	± 50 ppm resp. 3% of measurement value ⁽¹⁾			
							0...2.000 ppm	1 ppm	± 4 ppm resp. 3% of measurement value ⁽¹⁾			

(4) NO_x measurement via converter
(5) The measurement accuracy with an IR-Sensor of SO₂ is only guaranteed up to max. 2.000 ppm CO