

Overview of technical data

Measurement method	Electrochemical Sensors (EC)			Photoacoustic Spectroscopy (PAS)			Non dispersive Infra-red Technology (NDIR) ADVANCED		
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			1			max. 3 (also possible in connection with NDIR-STANDARD components)		
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...1.000 ppm (5)	1 ppm	± 2% of full scale
	0...63.000 ppm	5 ppm	± 100 ppm resp. 10% of measurement value (1)						
Carbon Dioxide CO ₂	Calculation via O ₂ -value						0...20 vol. %	0,01 vol. %	± 2% of full scale
Nitrogen Monoxide NO	0...5.000 ppm	1 ppm	± 5 ppm resp. 5% of measurement value (1)						
	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)	0-200 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			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)				0...1.000 ppm (5)	1 ppm	± 2% of full scale
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)									
Hydrocarbons C _x H _y (calibrated on CH ₄)									
Hydrocarbons C _x H _y (calibrated on C ₂ H ₆)									

(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

Measurement method	Non dispersive Infra-red Technology (NDIR) STANDARD			Catalytic Measurement (Pellistor)			Non dispersive Ultraviolet Technology (NDUV)		
APPLICATION	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.)		
MAXIMUM NUMBER OF GAS COMPONENTS	3 (also possible in connection with NDIR-ADVANCED-components)			1			3 (2-channel with NO _x / SO ₂ or 3-channel with NO _x / NO ₂ / SO ₂)		
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									
Carbon Monoxide CO	0...63.000 ppm	10 ppm	± 200 ppm resp. 3% of measurement value (1)						
Carbon Dioxide CO ₂	0...20 vol. %	0,01 vol. %	± 0,3 vol. % resp. 3% of measurement value (1)						
Nitrogen Monoxide NO	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)
Nitrogen Dioxide NO ₂	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...100 ppm	0,1 ppm	± 2 ppm resp. 2% of measurement value (1)
Nitrogen Oxides NO _x									
Sulphur Dioxide SO ₂	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...100 ppm	0,1 ppm	± 2 ppm resp. 2% of measurement value (1)
Hydrogen H ₂									
Hydrogen Sulphide H ₂ S									
Hydrocarbons C _x H _y (calibrated on CH ₄)				0...4 vol. %	0,01 vol. %	upon request			
Hydrocarbons C _x H _y (calibrated on CH ₄)	0...30.000 ppm	10 ppm	± 50 ppm resp. 3% of measurement value (1)						
Hydrocarbons C _x H _y (calibrated on C ₂ H ₆)	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