

Analyser specifications

	H ₂ S + Heating value	H ₂ S
Analytical hardware	2 parallel isothermal GC modules with narrow-bore capillary column technology in combination with MEMS based analytical components	1 isothermal GC module with narrow-bore capillary column technology in combination with MEMS based analytical components
Analysis output	Full composition of any natural gas up to C ₆₊ or C ₉₊ (optional) + H ₂ S concentration Heating value, density, Wobbe index	H ₂ S concentration
Component range	N ₂ : 0 – 20 % neo-C ₅ : 0 – 0.25 % CH ₄ : 0 – 100 % C ₅ : 0 – 0.25 % CO ₂ : 0 – 20 % C ₆ : 0 – 0.10 % C ₂ : 0 – 10 % C ₇ : 0 – 0.05 % C ₃ : 0 – 10 % C ₈ : 0 – 0.05 % C ₄ : 0 – 10 % C ₉₊ : 0 – 0.05 % H ₂ S : 15 ppm – 1% Concentrations outside these ranges on request	H ₂ S : 1 ppm – 1%
Analysis cycle time	6 minutes for C ₆₊ analysis 10 minutes for C ₉₊ analysis	3 minutes
Performance H₂S analysis		
Detection limit	15 ppm	1 ppm
Repeatability (stdev)	1 ppm or 1% of measured value (whichever is bigger)	1 ppm – 10 ppm 0.2 ppm 10 ppm – 100 ppm 0.5 ppm 100 ppm – 500 ppm 2 ppm 500 ppm – 2500 ppm 15 ppm 2500 ppm – 1% 50 ppm
Performance heating value measurement		
Uncertainty	< 0.10 % for all calculated properties	n.a.
Repeatability	< 0.01 % for all calculated properties	n.a.
Min. detection limit	1 ppm for C ₅	n.a.
Ambient conditions		
Ambient conditions	Temperature: -20 °C to +55 °C (provided heated version is used)	
Dimensions	Base Ø 37 cm x Height 37 cm (Ø 14" x Height 14")	
Weight	< 30 kg	
Approvals	ATEX II2G E Ex d IIB T4 IP 66, vibration and shock test in accordance with IEC 60068-2-31 and 64 EMC according to EN 61000-6-2 and EN 61000-6-4 TB Metrological Certificate Reference No. PTB-3.31-4016861	
Power supply	24 VDC, 18 W nominal (50 W start-up peak) for non-heated version 24 VDC, 120 W nominal (170 W start-up peak) for heated version (ambient < 0 °C)	
Interfaces	Ethernet UTP 10 Base-T for ModBus TCP/IP and PC link Two RS 232/485 ports for ModBus RTU or ASCII 3 analogue inputs for local sensors (4 – 20 mA or 0 – 10 VDC)	
Analyser	Complete stand-alone operation, including all calculations and generation of report formats, without need for operator intervention. Calculations in accordance with ISO 6976, GPA 2172 or GOST 22667	
PC requirements	Windows 2000 or Windows XP professional edition (Service Pack 1 or higher) 1000 MHz processor, 512 MB RAM, CD-rom player, free Ethernet port.	
Data logging	History Log: local storage of last 35 days of all analytical data (analysis, events, alarms, averages, last chromatogram, calibration data) in accordance with API Report 21.1. All data available on remote workstation in XML format	