

LaserGas™ III Portable HF Analyzer



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NEO Monitors LaserGas™ is using Tunable Laser Absorption Spectroscopy (TLAS) i.e. a non-contact optical measurement method employing solid-state laser sources.

The portable analyzer is compact, lightweight, and battery powered for HF measurement on the spot. With onboard pump and connections for Teflon tubing the target gas is continuously transferred into the internal measurement cell. The instrument's low power design gives long operating time on each battery cycle.

Features

- Most advanced LaserGas™ technology available (3rd generation)
- Portable (low weight)
- Low power usage <10 Watt
- Sub ppm HF detection
- No interference from other gases
- Stable calibration
- No zero drift

Applications

The LaserGas™ III Portable HF Analyzer is the solution for reliable detection of short-term HF concentrations, wherever diffuse emissions occur representing a risk to the work force.
Focused applications are:

- Aluminium smelters: Worker protection during active work
- Aluminium smelters: Mapping plant emissions
- Refinery alkylation plants: Worker safety

Customer benefits

- Flexible unit designed for measurement on the spot
- Allows fast and reliable operation to measure sub ppm and several hundred ppm HF concentrations
- Regular maintenance not required
- No cross interference from other gases
- Short-term HF peaks are uncovered with the LaserGas™ III portable
- Easy to carry
- Battery operated for several hours
- Internal storage of data

LaserGas™ III Portable HF Analyzer

Technical Data

Specifications Detection limit (HF)*: 50 ppb ** Repeatability: 1% of range (gas & application specific)	Installation and Operation Gas inlet / outlet: 6 mm SMC one touch fittings (series KQG) Sample gas flow: 3 l/min Sample inlet pressure: +/- 50 mbar G / 0.8 PSIG (higher pressures possible with different pump) Sample inlet temperature: Max 85 °C	Physical Dimensions: 110 x 120 x 250 mm (4.3" x 4.7" x 9.8") Weight (incl. battery): 2.3 kg (5 lbs) Display: 2.7" colour LCD panel Sample Cell: Teflon coated Aluminium
Storage 3MB		
Environmental conditions Operating temperature: -20 °C to +55 °C Storage temperature: -20 °C to +55 °C Protection classification: IP65		
Outputs Analog output (3): 4 – 20 mA current loop (concentration and transmission) Digital output: 10/100 Base T Ethernet (Modus TCP), RS-485	Calibration: Check recommended every 12 months	
Ratings Power consumption: Max. 10 W 4 – 20 mA output: 500 Ohm max. load impedance, not isolated	Maintenance Instrument check by Ethernet	
Battery: Lithium Ion Battery (14.4 V, 5 A, approx. 10 hours usage time per charge)	Filter change Recommended every 3 months	
	Safety Laser class: Class 1 according to IEC 60825-1, eye safe	

** NOTE: Detection limits are specified as the 95% confidence interval for 1 m optical path and gas temperature / pressure = 25 °C / 1 bar abs, measured in N₂.

*NEO Monitors reserve the right to change specifications without prior notice

Your local distributor:



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