LaserGas™ III Portable HF Analyzer





NEO Monitors LaserGas™ is using Tunable Diode Laser Absorption Spectroscopy (TDLAS) 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 protectioduring 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 spesific)

Range:

0 - 500 ppm

Storage

3МВ

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

Max. 10 W

Ratings

Power consumption:

4 – 20 mA output: 500 Ohm max. load

impedance, not isolated

Battery: Lithium Ion Battery

(14.4 V, 5 A, approx. 10 hours usage time

per charge)

Safety

Laser class: Class 1 according to

IEC 60825-1, eye safe

Installation and Operation

6 mm SMC one touch Gas inlet / outlet:

fittings (series KQG)

Sample gas flow: 3 l/min

+/- 50 mbar G / Sample inlet pressure:

> 0.8 PSIG (higher pressures possible with different pump)

Sample inlet temperature: Max 85 °C

Calibration: Check recommended

every 12 moths

Maintenance Instrument check by

Ethernet

Recommended every Filter change

3 months

Physical

110 mm x 120 mm x Dimensions:

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

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

measured in N₂.

Your local distributor:



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