

PRESS RELEASE

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NEW PORTABLE TDL HYDROGEN FLUORIDE (HF) ANALYSER

NEO Monitors AS, the Norwegian manufacturer of cutting edge laser-based gas analysers, launches with the **LaserGas III Portable for HF** its first portable instrument in the 3^d generation of LaserGas analysers. This new HF analyser is specifically designed for detection of local short-term hydrogen fluoride concentrations. The entire instrument weighs close to 2 kg only and is battery powered.

State of the art technology

NEO Monitors LaserGas is using Tuneable Diode Laser Spectroscopy (TDLS) i.e. a non-contact optical measurement method employing solid-state laser sources. The highly selective laser source operating at room temperature scans the single gas absorption line specific to hydrogen fluoride, thus eliminating cross interference from other gases and enabling a detection limit of 50 ppb. The sensor remains unaffected by the sample gas and does not require regular maintenance. Automatic correction for sample gas temperature and pressure variations is included. Moreover, TDLS provides an absolute zero point and a very stable calibration (a yearly calibration check is sufficient).

Compact, low power model

With an approximate footprint of 12 x 12 x 25 cm, the LaserGas III Portable is the most compact analyser we have ever build. The instrument is self-contained with on-board pump, touch screen display, internal memory for logging of data, measurement cell, and Li-Ion battery for 10 hours of continuous operation per charge. The new digital electronic design requires very low power of less than 10 W.



LaserGas III Portable HF Analyser

Fast and reliable

The LaserGas III Portable HF Analyser offers sufficient dynamic range to reliably measure sub ppm and several hundreds ppm HF concentrations. Once the instrument is turned on, the gas is continuously drawn into the measurement cell with a flow rate of 3 l/min, which corresponds to a response time of less than 2 seconds. In contrast to many other measurement techniques short-term HF peaks are uncovered with the LaserGas III.

Measurement readings are emitted through current loop outputs or digital outputs (Ethernet, USB, RS-485) and the Modbus protocol is supported. The LaserGas III analysers are our most reliable gas sensors with all electronics designed according to standard IEC 61508, SIL 2 (safety integrity level).

Key applications

The LaserGas III Portable HF Analyser 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 potroom worker protection and mapping plant emissions, both in Aluminium smelters, leakage detection in refinery alkylation plants, or HF stack gas testing in general.

Other gases such as NH₃, HCl, H₂S, CO, CO₂, CH₄, N₂O etc. can be measured with lasers operating at a different wavelength and are available on request.

About NEO Monitors

NEO Monitors AS – a subsidiary of Norsk Elektro Optikk AS (NEO) – is the leading manufacturer of laser-based gas analysers and dust monitors. The company offers the most complete line of instruments based on TDLS with the lowest detection limits in the market. NEO Monitors products are mainly sold to the process and combustion control market and the continuous emission monitoring (CEM) market. Europe is the most important market, but the company has also a significant market base in North America and Asia. NEO Monitors' heritage goes back to 1985.

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