

Fast measurements of multiple species with highest accuracy and reliability

NEW



H₂S/NH₃ Analyzer (H₂S, NH₃, CO₂, H₂O)

Features and Benefits

- Fastest response: 1-Hz measurements: allow observation of transient and time varying flows
- Extremely wide range of concentrations even in the presence of complex flows
- High-resolution absorption spectra always viewable
- Low power: ideal for field apps
- New Enhanced Performance model provides ultra-low drift and unsurpassed precision
- Full remote control via Internet

LGR's new H₂S/NH₃ (ammonia, hydrogen sulfide) Analyzer provides sensitive measurements in ambient air or in industrial process flows with extremely high precision and sensitivity. No longer do you have to wait a long time to measure these gases with high sensitivity and accuracy – LGR's H₂S/NH₃ Analyzer provides measurements every second with sub-ppm level precision. In addition, the H₂S/NH₃ Analyzer can report measurements quickly (on a dry and wet basis) over a very wide range of mole fractions even in complex process flows.

LGR's H₂S/NH₃ Analyzer is available in different versions to allow users to select the model suitable for their needs. LGR's "high sensitivity" model is designed for ultra trace detection of NH₃ and H₂S in ambient air, industrial process streams, or wherever highest detectivity is required. LGR's "industrial" model is designed for high accuracy measurements in complex processes which contain NH₃ and H₂S at levels that exceed the dynamic range of other analytical techniques.

LGR's new "Enhanced Performance" series incorporates proprietary internal thermal control for ultra-stable measurements with

unsurpassed precision, accuracy and drift. LGR's new "Ultraportable" series provides unparalleled ease of transport for users to hand carry the instrument in the field.

The H₂S/NH₃ Analyzer uses LGR's patented Off-axis ICOS technology, a fourth-generation cavity enhanced absorption technique. Off-axis ICOS has many advantages over conventional cavity ringdown spectroscopy (CRDS) techniques such as being alignment insensitive, having a much shorter measurement time, and not requiring expensive and complicated components.

LGR Analyzers include an internal computer (Linux OS) that can store data practically indefinitely on an internal hard drive (for unattended long-term operation), and send real-time data to a data logger through its analog, digital and Ethernet outputs.

Furthermore, LGR instruments may be fully controlled remotely via the Internet. This capability allows the user to operate the analyzer using a web browser anywhere Internet access is available. Remote access allows full control of the instrument and the opportunity to obtain data and to diagnose the instrument operation without being on site.

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Performance Specifications

Precision (1 σ , 1 sec / 100 sec):

High Sensitivity model

NH₃: 2 ppb / 0.2 ppb

H₂S: 15 ppb / 2 ppb

Industrial model:

NH₃: 10 ppb / 1 ppb

H₂S: 100 ppb / 10 ppb

Maximum Drift (Enhanced Performance model) (15 min average, at STP, over 24 hrs):

High Sensitivity model

NH₃: 0.3 ppb

H₂S: 5 ppb

Industrial model:

NH₃: 2 ppb

H₂S: 20 ppb

Measurement Range (meets specs):

High Sensitivity model:

NH₃: 0.001 – 10 ppm

H₂S: 0.001 – 10 ppm

Industrial model:

NH₃: 0.08 – 400 ppm

H₂S: 0.08 – 400 ppm

CO₂: 0.1 – 15%

H₂O: 0.1 – 100% RH noncondensing

Measurement Rates (user selectable):

0.01 – 1 Hz

Sampling Conditions:

Sample Temperature: -10 – 80 °C

Operating Temperature: 0 – 45 °C

Ambient Humidity: 0 – 100% RH non-condensing

Outputs (all models):

Digital (RS232), analog, Ethernet, USB

Power Requirements:

115/230 VAC, 50/60 Hz or 12 VDC

Standard models: 100 watts

Enhanced Performance models: 150 watts (steady state)

Dimensions:

Rackmount Package - Standard models:

8.75" × 19" × 24", 29 kg

Rackmount Package - Enhanced Performance models:

14" × 19" × 24", 40 kg

Ultraportable package:

18.5" × 14" × 7", 25 kg



Ordering Information

907-0039: Rackmount package - High Sensitivity model

911-0039: Enhanced Performance package - High Sensitivity model

915-0039: Ultraportable package

907-0040: Rackmount package - Industrial model

911-0040: Enhanced Performance package - Industrial model

915-0040: Ultraportable package

Accessories

908-0003-9001: Multiport Inlet Unit – Automated control of up to 16 inlet ports

908-0003-9002: Multiport Inlet Unit – Automated control of up to 8 inlet ports

904-0002: Data Logging System – multi-channel data logging system records and synchronizes serial (RS-232) outputs from multiple LGR analyzers and other devices (GPS, anemometers)