

GLA132-GGA

Ultraportable Greenhouse Gas Analyzer



Precise, accurate and rugged analyzers for measurement of CH₄, CO₂ and H₂O

Measurement made easy

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OA-ICOS™ GLA132-
GGA Ultraportable
Greenhouse Gas Analyzer

Features and benefits

- Simultaneous measurements of CH₄, CO₂ and H₂O
- Measurement rates selectable up to 1 Hz
- Extremely wide linear range
- Highly specific: robust to cross-interferences
- State-of-the-art stability and precision
- Installed and operational in minutes
- Unsurpassed reliability
- Real-time diagnostics

Overview

The ABB laser-based gas analyzers build on the heritage and extensive track record of Los Gatos Research analyzers, using patented Off-Axis Integrated Cavity Output Spectroscopy (OA-ICOS™) technology, the latest evolution in tunable diode laser absorption spectroscopy.

ABB's Ultraportable greenhouse gas analyzer reports measurements of methane, carbon dioxide and water vapor simultaneously in a compact, crushproof and travel-friendly analyzer.

As with all OA-ICOS analyzers, the GLA132-GGA is fast and simple to use which makes it ideal for field studies, compliance monitoring, air quality studies and soil flux studies, and wherever sensitive measurements of greenhouse gases are needed.

... Overview

The GLA132-GGA begins recording data within 20 seconds after power on so users do not have to wait for a long warm-up period for the system to thermally equilibrate.

ABB's patented OA-ICOS technology, a fourth-generation cavity enhanced absorption technique, has many advantages over older, conventional and delicate cavity ringdown spectroscopy and direct absorption techniques. ABB analyzers are easy to operate and robust, thus providing users with high performance and reliability at minimal operating costs.

The GLA132-GGA has an internal computer that can store data practically indefinitely (for applications requiring unattended longer term operation), and send real-time recordings to a data logger through its analog and digital (RS-232) outputs. The analyzer includes control and analysis software.

Accessories, Maintenance & Options

ACC-DP3H	3-head external pump for faster response time
OPT-EXTENDED-CH4	Extended range for CH₄ measurement Extends normal 0-100 ppm range to 0-1000 ppm
OPT-DATALOG	Digital Data Logging Capability Multi-channel data logging option records and synchronizes serial (RS-232) outputs from multiple ABB analyzers and other devices (GPS, anemometers)

* Contact your sales representative for more accessories, maintenance kits and options, per product series.

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Ordering information

OA-ICOS™ GLA132-GGA

Ultraportable Greenhouse Gas Analyzer

Specifications

Precision* (1s, 1 s/10 s/100 s):

CH₄: 1.4 ppb / 0.5 ppb / 0.2 ppb
CO₂: 300 ppb / 100 ppb / 30 ppb
H₂O: 50 ppm / 20 ppm / 10 ppm
* @ ambient concentrations

Measurement range (standard):

CH₄: 0 - 100 ppm
CO₂: 0 - 20000 ppm
H₂O: 0 - 30000 ppm

Measurement range (extended CH₄):

CH₄: 0 - 1000 ppm
CO₂: 0 - 20000 ppm

Measurement rate:

0.01 – 1 Hz (user selectable)

Sampling conditions:

Sample temperature: -40 – 50 °C
Operating temperature: 5 – 45 °C
Ambient humidity: <99% relative humidity non-condensing

Flow response time:

<8 seconds (1/e)
<2 seconds (1/e) with ACC-DP3H external pump

Communication:

Serial RS-232, USB (×2), AO (1 6-bits, 0 to 5 V DC), Ethernet LAN connection, VGA display, MIU, WiFi 802.11 b/g/n, 300 Mbps

Power:

60 W (11 – 30 V DC)
66 W (100– 240 V AC, 50/60 Hz)

Dimensions (H × W × D):

18 × 47 × 36 cm (7.0 × 18.5 × 14.0 in)

Weight:

16.9 kg (37.3 lb)