

ABB MEASUREMENT & ANALYTICS | DATA SHEET

OA-ICOS™ GLA131-MEA

Microportable Thermogenic Gas Analyzer



Sensitive, fast and compact analyzer for measurement of CH₄, C₂H₆ and H₂O

Measurement made easy

LGR-ICOS™ GLA131 Series
- Microportable analyzers

Features and benefits

- Lightweight: 6.1 kg with battery (included)
- Continuous measurements
- Data reported every second with high sensitivity
- Ideal for discrete measurement of natural gas emissions
- Extremely wide linear CH₄ range, up to 1%
- Eliminates cross interferences
- Battery-operated
- Fast gas flow response time
- Records data within 20 seconds after power on
- Multiple data outputs and internet connectivity

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 new microportable gas analyzer GLA131-MEA report measurements of methane and ethane simultaneously in a package that is compact, crushproof and travels anywhere. Small enough to be hand-carried (even on-board aircraft) and requiring less than 35 watts, the GLA131-MEA offers opportunities to measure thermogenic gas anywhere.

As with all OA-ICOS analyzers, the GLA131-MEA 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 GLA131-MEA 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. LGR-ICOS analyzers are easier to operate and more robust, thus providing users with higher performance and reliability at lower operating costs.

The GLA131-MEA analyzer has an internal computer that can store data practically indefinitely on an SD card and send real time data to a tablet, smartphone or other WiFi device. The analyzer includes control and analysis software.

Accessories, Maintenance & Options

ACC-MICRO-KIT	Accessory kit for microportable Includes shoulder strap and collapsible wand
ACC-MICRO-AC	AC Power adapter for microportable GLA131 Series
ACC-MICRO-B	Spare battery for microportable GLA131 Series 99.4Wh
ACC-MICRO-BC	Dockstation battery charger for microportable GLA131 Series
ACC-DCMICRO	DC Power Case for Microportable For use with LiFePO4 batteries, for extended autonomy (Battery not included)
ACC-WIFI-iPad	Wireless User Interface - Apple iPad Mini with WiFi router Provides full instrument control and provides touch-screen video display, keyboard and mouse.
ACC-WIFI-Android	Wireless User Interface - Samsung Galaxy tablet with WiFi router provides full instrument control and provides touch-screen video display, keyboard and mouse.
MTN-CLEAN-1V	Mirror cleaning kit for microportable
MIU-8	Multiport Inlet Unit 8 channels - External hardware (includes 8 solenoid valves) and internal software package which enables fully integrated, programmable selection from up to 8 separate sources.

Contact your local sales representative for complete list of optional items.

Ordering information

- GLA131-MEA

Specifications

Precision* (1 σ , 1 sec / 10 sec):

CH₄: 0.9 ppb / 0.3 ppb

C₂H₆: 20 ppb / 7 ppb

H₂O: 10 ppm / 3 ppm

*@ambient concentration

Measurement ranges:

CH₄: 0 – 1%

C₂H₆: 0 – 500 ppm

Sampling conditions:

Sample temperature: -40 – 50 °C

Operating temperature: 5 – 45 °C

Ambient humidity: <99% relative humidity non-condensing

Flow response time:

<0.4 second (1/e)

Data measurement rate:

0.01 – 10 Hz (user selectable)

External data interfaces:

WiFi, Ethernet, USB, MIU connection (8 ports), Serial(RS-232)

Power requirements:

10-30 VDC battery operated

110/240 VAC for battery recharge

35 W power consumption

120 W Power supply/charger included

99.4 Wh 6900mAh internal battery included

up to~3 hours autonomy

Dimensions:

12cm H x 34 cm W x 29.5 cm D

6 in. H x 13.4 in. W x 11.6 in. D

Weight:

6.1 kg (13.5 lbs) with internal battery