

Portable Benchtop Oxygen Analyzer

GAB-1700 Series



- Non-Depleting Paramagnetic Measurement Technology Ensures the Unit is Always Ready for Use
- Accurate, Reliable and Component Specific, Giving Confidence that Observed Values are Credible and Not Due to Background Interference
- Customer Pre-Tested Software Offers Ease of Use, Simple Calibration and Advanced Features
- Innovative Construction Gives a Robust Unit with a Space Saving Footprint
- Rechargeable Battery Option Enables Mobile Use

The OMEGA® GAB-1700 oxygen analyzer has been specifically designed to meet the demanding needs of field and laboratory analysts, light industrial users and others who require fast, accurate and reliable analysis of common gas mixtures.

This compact, portable and easy to use instrument is based upon a non-depleting, component specific measurement technique (magnetodynamic paramagnetic) for long life and minimal running costs, avoiding the problems associated with electrochemical or other less robust methods of analysis.



GAB-1701 shown smaller than actual size.

SPECIFICATIONS

Gases Measured Oxygen (O₂) **Sensors** Oxygen

Technology: Paramagnetic

Variant: Industrial

Full Scale Range (FSR): 0 to 100% O₂

Minimum Output Range: 0 to 1% O₂

Cell Construction: 316 stainless steel

Decimal Places: 1

Performance

Accuracy:

General Use: ±0.1% O₂

Stable Environment: ±0.1% O₂

Zero Drift, Per Week: ±0.2% O₂

Response Time (T90): <15 seconds

Tilt Effect, at 15° from Calibration: ±0.15% O₂

Pressure Effect: Directly proportional to ambient barometric pressure

Flow Variation Effect: ±0.1% O₂ for a ±0.5 psig (3.5kPa) change

Operating Temperature: -10 to 50°C (14 to 122°F)

Temperature Coefficient:

Zero: ±0.2% O₂ per 10°C (18°F)

Span: ±0.3% O₂ per 10°C (18°F)

Sample

Sample Gas: Clean, dry, non-flammable and non-toxic gases only

Note: Though samples containing >5% CO₂ are toxic they can be analyzed if suitable precautions are taken.



Flow Control: To maximize measurement stability, unpumped units are supplied with an automatic flow control device (AFCD); over the specified inlet pressure range this controls sample flow rate to approximately 1.5 to 6 liters (0.05 to 0.2 cubic feet) per minute

Sample Inlet Connection: 5 mm (0.19") OD stub with "quickconnect" barb fitting for 6.3 mm (1/4") ID tube or adaptor to 1/8 NPT fitting option

Sample Outlet Connection: 5 mm (0.19") OD stub (sample and bypass)

Inlet Pressure:

Without Pump: 7kPa to 70kPa (1 to 10 psig)

With Internal Pump (Optional): -7kPa to 3.5kPa (-1 to 0.5 psig)

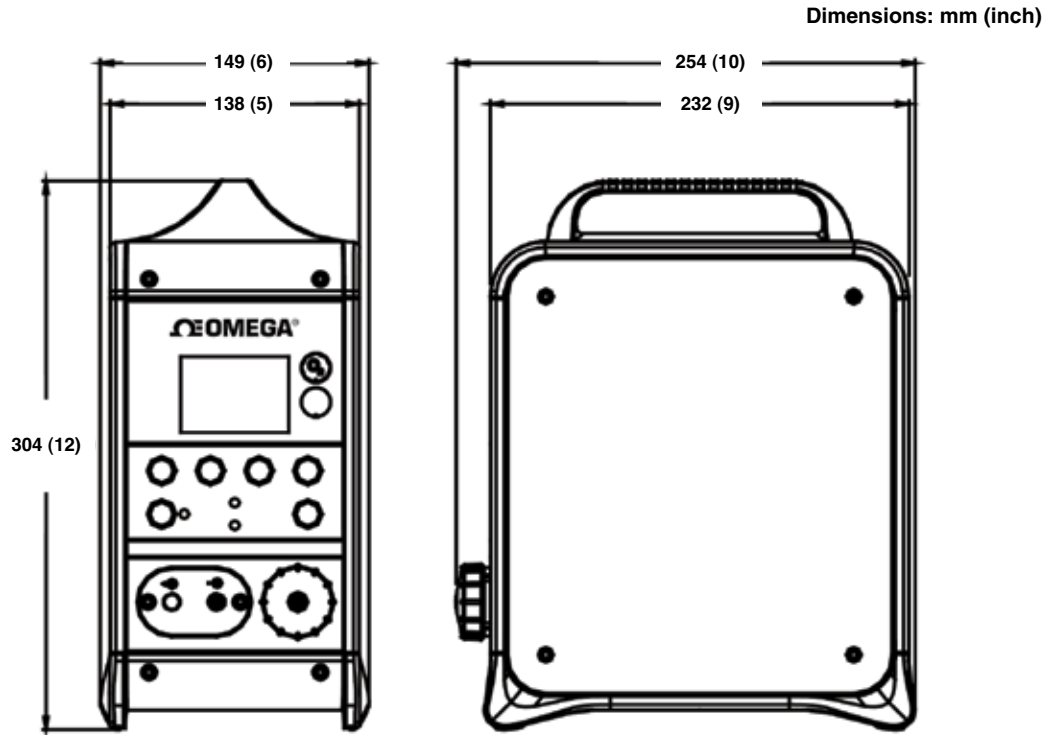
Sample Filter: Replaceable 0.6 µm glass fiber particulate filter

Response Time: All at 70kPa (10 psig)

Flow Effect: AFCD version, within specified sample gas supply range

Dimensions: 150 W x 260 D x 300 mm H (6 x 10.5 x 12")

Weight: 2.6 to 3.9 kg (5.7 to 8.6 lb), depending on configuration



Warning: These analyzers are not medical devices as defined in the Medical Devices Directive 93/42EEC and are not intended to be used on human beings for the diagnosis, prevention, monitoring, treatment or alleviation of disease, injury or replacement or modification of the anatomy. We recommend a calibration of the analyzer after each power up.

To Order	
Model No.	Description
GAB-1701	Paramagnetic O ₂ sensor, mains operation, AFCD, RS232
GAB-1702	Paramagnetic O ₂ sensor, mains operation, AFCD, RS232, 4 to 20 mA output
GAB-1703	Paramagnetic O ₂ sensor, mains operation, internal pump, RS232
GAB-1704	Paramagnetic O ₂ sensor, mains operation, internal pump, RS232, 4 to 20 mA output
GAB-1711	Paramagnetic O ₂ sensor, lithium-ion rechargeable battery, AFCD, RS232
GAB-1712	Paramagnetic O ₂ sensor, lithium-ion rechargeable battery, AFCD, RS232, 4 to 20 mA output
GAB-1713	Paramagnetic O ₂ sensor, lithium-ion rechargeable battery, internal pump, RS232
GAB-1714	Paramagnetic O ₂ sensor, lithium-ion rechargeable battery, internal pump, RS232, 4 to 20 mA output

Approvals: CE marked and in compliance with the EEC EMC and WEEE Directives.
UL Approved and CE marked 100 to 240V/43 to 70 Hz AC power supply.