

# AGC Veri-GAS Analysers

Accurate Handheld Analysers for CO<sub>2</sub> and O<sub>2</sub>

## About the Veri-GAS Range

### Veri-GAS CO<sub>2</sub>

The Veri-GAS CO<sub>2</sub> analyser was developed for measuring percentage Carbon Dioxide (CO<sub>2</sub>) in CO<sub>2</sub> / Ar welding gas mixtures or other CO<sub>2</sub> mixtures such as CO<sub>2</sub> in Nitrogen mixtures for beverage gas cylinders.

The Veri-GAS CO<sub>2</sub> has a specially engineered Sample Probe with integrated Flow Limiting Devices and in-built Particle Filters. Furthermore, the analyser comes with all the fittings necessary for connection between the analyser and the sample source as specified by the customer. Calibration and flow testing is also carried out on every unit for the specified application prior to shipping.

### Veri-GAS O<sub>2</sub>

The Veri-GAS O<sub>2</sub> analyser measures Oxygen (O<sub>2</sub>) in an area which has typically been purged with Argon where welding will occur. It can also be used for glove-box analysis or testing any environments where the oxygen levels must be measured.

By placing the sample probe in the weld zone, or any other area, and pressing the start button, the Veri-GAS O<sub>2</sub> will continuously sample the atmosphere for oxygen levels. Once the correct level of oxygen is observed, the operator can stop the analysis at the touch of a button to proceed with the welding process or other applications.

## Typical Applications

### Veri-GAS CO<sub>2</sub>

- Verify Carbon Dioxide content in Argon/Carbon Dioxide welding gas mixtures (e.g. 25% CO<sub>2</sub> / 75% Ar).
- Analysis of percentage Carbon Dioxide in Nitrogen/ Carbon Dioxide mixtures for beverage gas cylinders.
- Analysis of Carbon Dioxide in other gas mixtures.
- For Connection to Pressurised Supply Lines or Cylinders.

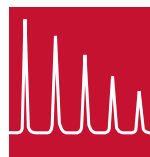
### Veri-GAS O<sub>2</sub>

- Welding purge gas analyser: For measuring low levels of Oxygen where a backing gas / purge gas (typically Argon) is used in a zone where welding will occur.
- Analysis of percentage Oxygen levels from exhaust gases (automotive application).
- Glove Box Analysis



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## Features of the Veri-GAS Analysers

- Lightweight & Portable
- Armoured heat-shielded tubing
- Easy Connection Fittings
- Intuitive Interface
- Measurement range of 0.1% - 100%
- Highly Accurate
- Measurement results achieved within seconds
- Low Maintenance
- Straightforward Calibration Procedures
- Holster for the probe
- Probe blockage alarm
- 7 hours of Battery Life / Mains power supply
- Fast Recharge Feature



## Principle of Operation

### Veri-GAS CO<sub>2</sub>

The Veri-GAS CO<sub>2</sub> analyser measures the levels of Carbon Dioxide (CO<sub>2</sub>) from a pressurised source which has been regulated to less than or equal to 8 bar pressure. The specially engineered sample probe has integrated flow limiters and filters to allow an optimal sample to reach the customised nondispersive infrared sensor (NDIR). The CO<sub>2</sub> particles are then continuously monitored once the analysis is started and the measurements are displayed on the screen within seconds.



### Veri-GAS O<sub>2</sub>

The Veri-GAS O<sub>2</sub> operator places the probe in the area where Oxygen (O<sub>2</sub>) is to be measured and presses the start button. The analyser then begins the analysis by using a small pump to continuously draw a sample from the area into the analyser. The levels of O<sub>2</sub> are then measured by an electrochemical sensor and the readings are displayed on the screen within seconds. The Veri-GAS O<sub>2</sub> comes with a specially engineered sample probe that dissipates any heat transfer when used in hot areas. This is supported by an in-line heavy duty particle filter.



Specifications	Veri-GAS CO <sub>2</sub>	Veri-GAS O <sub>2</sub>
Gases Measured	Carbon Dioxide CO <sub>2</sub> with Balance reading	Oxygen - O <sub>2</sub>
Measurement Range	0% to 100% in 0.1% increments	0% to 100% in 0.1% increments
Pressure Range	≤ 8 Bar	N/A - Ambient Pressure
Sensor Technology	Non-dispersive infrared (NDIR) Sensor	Electrochemical Sensor
Sensor Lifetime	Indefinitely	2 Years*
Accuracy	± 1% (full scale)	± 0.5%
Resolution	0.1%	0.1%
Repeatability	1% relative to gas reading	1% relative to gas reading
Response Time	<10 seconds	<10 seconds
Sample Probe	In-Built Particle Filters Integrated Flow Limiting Devices Easy Connect Fittings for fast connection	Specially engineered probe to dissipate heat In-Line Heavy Particle Filter
Calibration	CO <sub>2</sub> at 70% / 30% / 20% / 0%	Ambient / O <sub>2</sub> at 0% / O <sub>2</sub> at 100%
Tubing	Armoured Heat Resistant Tubing	
Temperature Range	0 to +40 Degrees Celsius	
User Interface	Graphic Display with backlight 30 x 60 [mm]	
Power Supply		
Mains Adapter	9V wall adapter (Universal AC supply)	
Battery Pack	4 NiMH rechargeable cells	
Operation Time	7 hours normal use from full charge / Continuous operation using mains adapter	
Power Saver	Automatic Shutdown after 2 minutes of non-use/idle time	
Enclosure	Strengthened & Wipe-clean ABS Plastic with integrated probe holder	
Weight	450 grams	
Dimensions	L =228, W=72/117, H=47 [mm]	
Approvals	CE - marked according to: EMC 2004/108/EC , Low Voltage Directive 2006/95/EC Manufactured under the ISO 9001:2008 Quality Management System	

\*Higher Oxygen levels may reduce this life span depending on the concentration being measured.

## Carry Case and Accessories Included

### Veri-GAS CO<sub>2</sub>

- Customised Carry Case (1 off)
- Sample Probe and Fittings (1 off)
  - In-built Particle Filter
  - Integrated Flow Limiting Device
  - Easy Connection BSP or other Fittings
- Armoured Heat Resistant Tubing (1 off)
- Rechargeable Batteries (4 off)
- Country Specific Mains Adapter (1 off)
- User Manual (1 off)
- Calibration Certificate (1 off).

### Veri-GAS O<sub>2</sub>

- Customised Carry Case (1 off)
- Sample Probe and Fittings (1 off)
- Heavy Duty Particle Filter (2 off)
- Armoured Heat Resistant Tubing (1 off)
- Rechargeable Batteries (4 off)
- Country Specific Mains Adapter (1 off)
- User Manual (1 off)
- Calibration Certificate (1 off).





## Company Profile

### AGC Instruments

AGC Instruments is a leading manufacturer of Gas Analysis Solutions to all users requiring a Quality Control or identification of their gas stream. We have over 50 years experience in providing our customers with their "Total Gas Analysis Solutions". We work closely with all customers to ensure they obtain the analytical solution that meets their needs and a system that is easy to use and understand. All AGC distributors are extremely experienced and factory trained to the highest standards, offering you a complete after sales support service.

The wide range of Detectors available can be customised to measure unique gas streams and we place an emphasis on the continuous development of our analytical solutions. Our worldwide reach with strategic partners ensures that you have peace of mind and after sales care that are important to your operations.

## Aftersales Care

AGC Instruments are committed to providing and maintaining quality systems from customer liaison to technical knowledge through to System Design and Delivery. We believe that our After Sales Support to the customer is one of the most important services we can offer. Each Distributor has been carefully selected and trained to ensure our customers receive the best possible service. Furthermore, online customer support and direct support are available to deliver a comprehensive support package.

For more information please contact:

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