

GB 100 3 Channels Gas Mixer

Create dynamic gas mixtures for micro flows



MCQ INSTRUMENTS

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High Flexibility - From static to dynamic gas mixtures

Pre-mixed Gas Cylinders are notoriously expensive and limiting. By using the MCQ Gas Mixers it is possible to create dynamic gas mixtures at any time, letting you free to set your flow rates, concentrations and blending on-demand from different sources of Gas. GB100 provides a level of flexibility that gas cylinders simply cannot.

The Ultimate Gas Mixers

MCQ Instruments offers the best, cheapest and fastest solutions to manage, control, measure and create Gas Mixtures or Dilutions.

We produce advanced, certified, interconnected, and trusted technologies that can help you to achieve your goals without any efforts. From laboratories to industrial needs, we have the right product that will manage your gas processes with automation



Key Features

MCQ Instruments offers the best, cheapest and fastest solutions to manage, control, measure and create Gas Mixtures or Dilutions.

We produce advanced, certified, interconnected, and trusted technologies that can help you to achieve your goals without any efforts. From laboratories to high-flow needs, we have the right product that will manage your gas processes with automation and an incomparable precision.

- Gases: N₂, O₂, CO₂, CH₄, Air, He, H₂
- High Accuracy – Native calibration on available gas with 1% of accuracy for each channel
- Lab in a Box – All the tools in a single, compact and easy to transport box.
- Software Bundle – Mixture Creator is a user friendly interface, with which you can easily manage any gas mixing process.
- GB Family – We have as many solutions as many are your needs.

Fast Response

We are proud to have developed the fastest device on the market.

Our GB 100 is a champion when we talk about accuracy and modularity of micro flows of gases. A change of the setpoint takes only 50ms to be real. Besides this is a value valid for every single channel

High Accuracy

The incomparable precision of our Gas Mixer makes possible to bring forward a series of tests and experiments that would be impossible to achieve otherwise.

GB 100 is a dedicated solution for laboratories, and a solid alternative to the obsolete multi-channel solution using mass flow controllers, external power supply and readout.

Intuitive Software

For Advanced functionality or to control the instrument via PC, we also provide MCQ Mixture Creator. A complete gas mixing software, that allows direct access and control to all the parameters of our products. Thanks to a user-friendly interface, you can manage the gas mixing process to modify and control both the final blending and your dynamic dilution.



Easily Connected

MCQ Gas Blender 100 is easy to install and to use. You will only need a laptop or a desktop computer to connect the instrument via a simple USB connection.

An easy push-in tube fittings system will allow you to connect your cylinders to the instrument and the output to lead your final mixture into your system.



RS-485

Market Analysis

Research and Development (R&D) Labs, Institutes and Centers

- Calibration of Instruments
- Preparation of Test Gases
- Analytical Equipment
- Local Preparation of Gas Mixtures
- Chemical Laboratory

Analysis

- Gas Chromatography
- Quality Control

Food & Beverage

- Regulation of Controlled Atmospheres Life Sciences

Life Sciences

- Biotechnology
- Regulation of Gaseous Atmospheres
- Studies on Cell Cultures
- Pharmaceutical

Specifications

Accuracy (for each channel)	N ₂ , 20 °C, 101.325 kPa (1 atm): 5-100% FS: 1% of SP < 5% FS: 0,2% of FS
Repeatability	0,16% of reading
Response time (for each channel)	50 ms
Power Supply	16-36 VDC - Min1,5 A
Operation Pressure	Max 25 psi
Working Temperature	0-50 °C
Mass Flow Rates (for each channel)	0 - 500 mL/min (standard) 0 - 200 mL/min (on request)
Total Mixture Flow Rate	Up to 1,5 L/min
Gases	N ₂ , O ₂ , CO ₂ , CH ₄ , Air (additional gases supported on request)
Communication	USB PC Interface (*)RS 485 with open proprietary protocol *To be implemented
Fittings	Push-in fittings for 6-4mm tubes. Other on request
Inlet Gas Channel	3 Inputs
Outlet Gas Channel	1 Output of mixed gases
User Interface	Gas mixing software. 1 LED signal interface.
Certifications	CE, TUV, cTUVUS, Made in Italy

Ordering Info

Order No.	Description
75-2300	GB-100 (3 channels) Gas Mixer



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