

# GB 100

## 3 Channels GAS Mixer

Each Channel: 0 - 500 mL/min  
Total Mixture Flow Rate: Up to 1,5 L/min  
Accuracy: 1.0%  
Repeatability: 0,16% of reading  
Response time: 50 ms  
Software bundle.



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## For MICRO Flows

Create Dynamic GAS Mixtures



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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 high-flow needs, we have the right product that will manage your gas processes with automation and an incomparable precision.

## Gases:

N<sub>2</sub>,  
O<sub>2</sub>,  
CO<sub>2</sub>,  
CH<sub>4</sub>,  
Air

(additional gases supported on request)



## 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.

## Easy 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.



\* To be implemented

## Intuitive Software.

### AUTOMATION AND FLEXIBILITY



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.

## Certified Products.



Type Approved  
Safety  
Regular Production  
Surveillance  
[www.tuv.com](http://www.tuv.com)  
ID 1111218183



PENDING



MADE IN ITALY



## 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

## 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

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

# Accurate. Compact. Reliable.

*“The MCQ Gas Blender 100 is our solution for Micro Flows Gas Mixing & Dilution problems. A 3 channels solution in a compact box at a very convenient price. Easy to install, to set, and to use, it is the fastest instrument on the market.”*

## Specifications.

**Accuracy:**  
(for each channel) N<sub>2</sub>, 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 - Min 1,5 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<sub>2</sub>, O<sub>2</sub>, CO<sub>2</sub>, CH<sub>4</sub>, Air  
(additional gases supported on request)

**Communication:** USB PC Interface  
(\* )RS 485 with open proprietary protocol ---- \*To be implemented

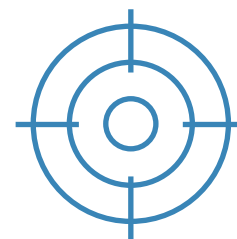
**Fittings:** Push-in fittings for 6-4mm tubes.  
Other on request

**Inlet Gas Channel:** 3 Inputs

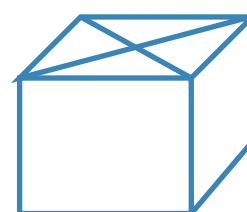
**Outlet Gas Channel:** 1 Output of mixed gases

**User Interface:** Gas mixing software.  
1 LED signal interface

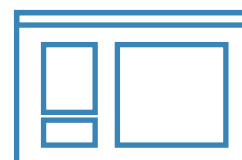
**Certifications:** CE, TUV, cTUVUS, Made in Italy



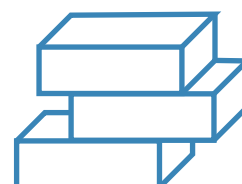
**High Accuracy**  
Native calibration on available gas with 1% of accuracy for each channel.



**Lab in a Box**  
All the tools in a single, compact and easy to transport box.



**Software Bundle**  
Mixture Creator is an 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.