

# GB 2000

## 2 Channels GAS Mixer

Each Channel: 0 – 5000 mL/min  
Total Mixture Flow Rate: Up to 10 L/min  
Accuracy: 1.0%  
Repeatability: 0,10% of reading  
Response time: 500 ms  
Software bundle.



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## For STANDARD Flows

Create Dynamic GAS Mixtures



## 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.

GB2000 provides a level of flexibility that gas cylinders simply cannot.

# The Ultimate Gas Mixers.

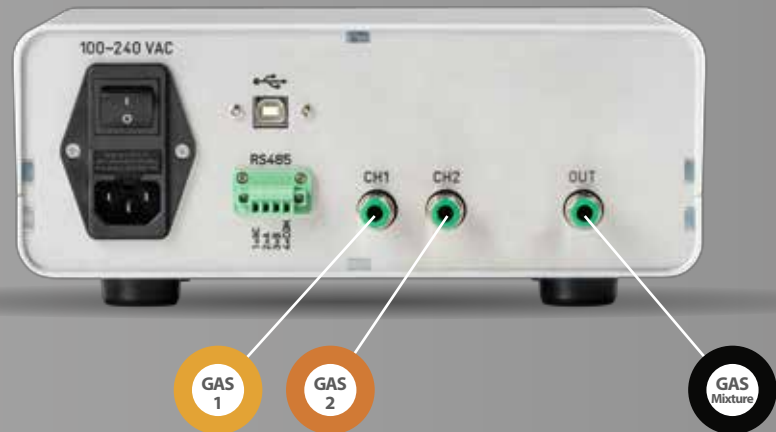
MCQ Instruments offers the best, cheapest and fastest solutions to manage, control, measure and create Gas Mixtures or Dilutions.

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 and an incomparable precision.

## Gases:

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

(additional gases supported on request)



## Touch Display.

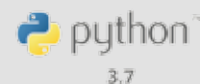
The Gas Blender 2000 is a stand-alone device, and it allows you to control all the parameters and access all the main features by the Touch Display.

The user interface already contains several of the most important actions such as Play and Stop the gas mixing, regulation of the gas ratio for each channel, native gases setting and much more.

## Easy to Integrate.

Gas Blender 2000 is not only USB connected, but Bluetooth ready, with the possibility of future Wi-Fi implementation. This functionality allows customers to remote control the instrument.

Its integrability with ProfiBus, ModBus, & Simulink gives the possibility of an extremely easy integration into other systems. Moreover, we supply a Python Library to control the instrument via RS485.



## 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.



## Automated Feedback System.

With Gas Blender 2000, you can create, save and load your automatic mixture program, set the percentage of each channel, the total flow of the gas mixture and processing duration.

The program code can be edited anytime, exported to an external file and reloaded later.

## 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

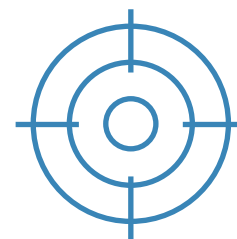
- Biotechnology
- Regulation of Gaseous Atmospheres
- Studies on Cell Cultures
- Pharmaceutical

# Accurate. Compact. Reliable.

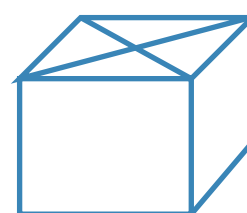
*“The MCQ Gas Blender 2000 is the ultimate solution specifically designed for laboratories, for non - corrosive gas mixings and dilutions. It is an innovative all - in - one replacement for traditional mass flow controllers multi - channel solutions.”*

## Specifications.

<b>Accuracy:</b> (for each channel)	10-100% FS: 0,2% of FS < 10% FS: 1% of FS
<b>Repeatability:</b>	0,10% of reading
<b>Response time:</b> (for each channel)	200 ms
<b>Power Supply:</b>	In Bundle
<b>Operation Pressure:</b>	Max 3 bar
<b>Working Temperature:</b>	0-50 °C
<b>Mass Flow Rates:</b> (for each channel)	0 – 5000 mL/min (standard)
<b>Total Mixture Flow Rate:</b>	Up to 10 L/min
<b>Gases:</b>	N2, O2, CO2, CH4, Air, He, H2 (additional gases supported on request)
<b>Compatibility:</b>	Profibus, Modbus, Simulink, Python
<b>Communication:</b>	USB PC Interface RS485 with open proprietary protocol
<b>Fittings:</b>	Swagelok NPT or Push-in fittings for 6-4mm tubes. Other on request
<b>Inlet Gas Channel:</b>	2 Inputs
<b>Outlet Gas Channel:</b>	1 Output of mixed gases
<b>User Interface:</b>	Gas mixing software. Touch Display.
<b>Certifications:</b>	CE, TUV, cTUVUS, Made in Italy



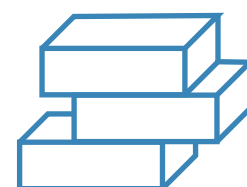
**High Accuracy**  
Native calibration on available gas with 1% of accuracy for each channel



**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.