GB 100 PLUS

Up to 6 Channels **GAS Mixer**

Each Channel: 0,5 – 500 mL/min
Accuracy: 1.0%
Repeatability: 0.10% of reading
Response time: 100 ms
Software bundle.

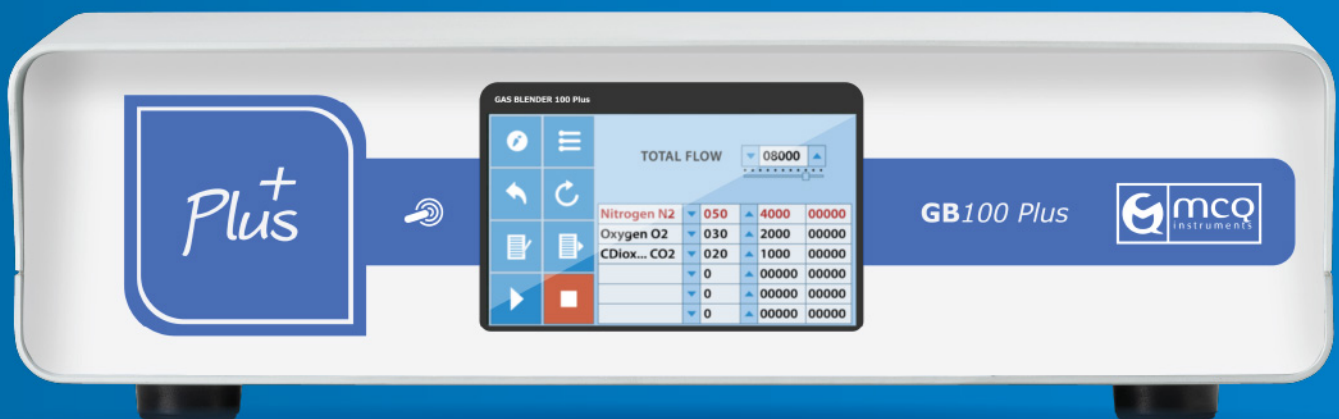**mcq** instruments ®

www.mcqinst.com
info@mcqinst.com

For **MICRO** Flows

Create Dynamic GAS Mixtures

GAS BLENDER 100 Plus

			TOTAL FLOW		08000	
Nitrogen N2		050		4000	00000	
Oxygen O2		030		2000	00000	
CDiox... CO2		020		1000	00000	
		0		00000	00000	
		0		00000	00000	
		0		00000	00000	

GB100 Plus

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 Plus 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:

N2,
O2,
CO2,
CH4, Air,
He, H2

(additional gases supported on request)

Touch Display.

The Gas Blender 100 Plus 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 100 Plus is not only USB connected.

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.

python 3.7

485 BUS

PROFI BUS

Modbus

USB

MATLAB SIMULINK

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 100 Plus, you can create, save and load your automatic mixture program, set the percentage of each channel, the total flow of the gas mixture and process 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
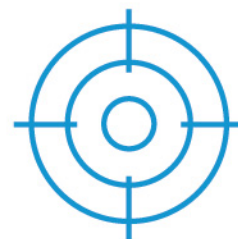- Regulation of Controlled Atmospheres

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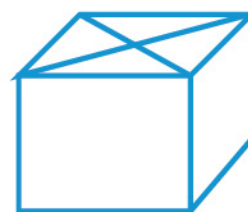- Pharmaceutical

Accurate. Compact. Reliable.

"The MCQ Gas Blender 100 Plus 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.

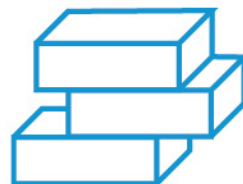|	
Accuracy: (for each channel)	N2, 20 °C, 101.325 kPa (1 atm): 5-100% FS: 1% of SP < 5% FS: 0,2% of FS
Repeatability:	0,10% of reading
Response time: (for each channel)	100 ms
Power Supply:	In Bundle
Operation Pressure:	Max 3 bar
Working Temperature:	15 - 25 °C
Mass Flow Rates: (for each channel)	0,5 – 500 mL/min on N2 (Standard)
Gases:	N2, O2, CO2, CH4, Air, He, H2 (additional gases supported on request)
Compatibility:	Profibus, Modbus, Matlab Simulink, Python
Communication:	USB PC Interface RS485 with open proprietary protocol
Fittings:	Swagelok NPT or Push-in fittings for 6-4mm tubes. Others on request
Inlet Gas Channel:	Up to 6 Inputs
Outlet Gas Channel:	1 Output of mixed gases
User Interface:	Gas mixing software. Touch Display.
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.

Sofware 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.