

GB NANO 3

3 Channels GAS Mixer

Each Channel: 0 – 200 mL/min
Total Mixture Flow Rate: Up to 0,6 L/min
Accuracy: 1.0%
Repeatability: 0,10% of reading
Response time: 100 ms
Software bundle.

®



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For NANO Flows

Create Dynamic GAS Mixtures



Gas Mixer for CELL EXPANSION SYSTEM

Designed specifically for cell expansion processes, the GB Nano 3 offers precise control and blending of gases, creating optimal growth conditions. Its versatility allows for the creation of various conditions, including Hypoxia and Anoxia, by simply using Pure Gas Cylinders or diluting Air from the wall-mounted pipe. As an essential component in cell culture laboratories, the GB Nano 3 supports research and development by facilitating advancements in cell-based studies.



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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 Nano 3 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 Nano 3 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.



Easy Automation

With Gas Blender Nano 3, 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.

GMP Suited

In laboratory settings where the use of gas cylinders is prohibited, researchers can still achieve their desired conditions using the Gas Mixer in conjunction with the convenient wall-mounted Air pipes.

This innovative solution allows for precise managing of gases, enabling the creation of optimal growth environments for cell expansion processes.

Thanks to the Gas Mixer's capabilities, including the ability to generate hypoxia, anoxia, and other conditions through the simple dilution of Air, laboratories can overcome limitations and continue to drive advancements in cell-based studies.



Accurate. Compact. Reliable.

"The MCQ Gas Blender Nano 3 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 pre-mixed cylinders solution."

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:	0-50 °C
Mass Flow Rates: (for each channel)	0 – 200 mL/min (standard)
Total Mixture Flow Rate:	Up to 0,6 L/min
Gases:	N2, O2, CO2, CH4, Air, He, H2 (additional gases supported on request)
Compatibility:	Profibus, Modbus, Simulink, Python
Communication:	USB PC Interface RS485 with open proprietary protocol
Fittings:	Swagelok NPT or 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. 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.



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.

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