



NEW
BUILT IN
SECOND STAGE
DILUTION

GASMIX™ AIOLOS III

The intelligent mixer & diluter

To address the ever-growing analytical request, save money and gain in flexibility, many laboratories use Aiolos - dynamic gas mixer from AlyTech - to perform multi-point calibration, linearity checks, LOQ/LOD validation.

AIOLOS III is the latest generation of this popular model in the GasMix™ family designed and produced by AlyTech since over 15 years. By mixing and / or diluting 2 to 6 gases the system generates calibration gas on site at the desired concentration with low uncertainty even at ppb levels.

High accuracy and reproducibility of the prepared gas standards make Aiolos III an accomplished equipment, well-accepted by users concerned with metrological performances.

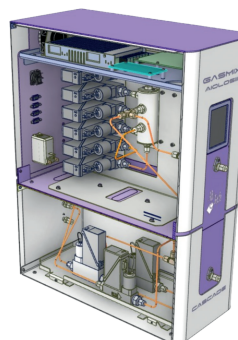
GasMix™ are unique diluters on the market capable to deliver a certificate for the produced concentration.

The GasMix™ provides an automated, cost-effective way of on-site gas preparation and helps in the management of the following aspects:

- Reduce the gas consumption
- Prepare and inject mixtures in an accurate and repeatable manner
- Reduce the number of necessary gas standards
- Reduce operator bench time
- Work with a wide range of mixtures and concentrations

BENEFITS:

- New software to carry out all the calculations and to have a complete quality follow-up.
- Reduce costs by optimizing the use of your calibration gas cylinders.
- Generate a wide range of concentrations from % to ppb.
- The complete automation of the system saves significant operator time.
- Unmatched accuracy: calibration to several hundred points for each MFC and gas used.
- Rigorous metrology: full traceability, documentation, and a guarantee of the concentration produced.
- Complies with ISO 6145-7.
- Compatible with aggressive gases and active compounds like trace sulfurs, ammonia, VOC.
- Fully upgradable, addition of gas channel and/or accessories FReD, Cascade, ... is possible any time during the life time of the unit.





A smart, scalable instrument that mixes and dilute gases over a wide range of concentrations from ppb to %.

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Dedicated software

Made by experts, GasMix™ has its dedicated, user-friendly and fully redesigned software. Easy to handle, the software controls the operation of the system, calculates the flow, handles the calibration tables (automatic calculation of correction factor), communicates with an analyser, and much more.

User can easily automate the process by synchronizing dilutions, injection, flushing timings with an external analyser, like gas chromatograph, pre-concentrator, spectrometer, gas analyser or other system and store it in a preprogrammed sequence.

Metrology

Every individual Mass Flow Controller (MFC) used in GasMix™ instrument undergoes a rigorous factory calibration procedure with 20 set points across the whole range ensuring highest accuracy and linearity with particular attention to low and high end. The procedure is repeated for every gas matrix on customer choice (He, Ar, CH₄, H₂, N₂, Air, ...). Multipoint calibration tables for every gas are stored in the software and applied automatically for selected gas in use.

Following highest metrology requirements, the instrument not only accurately prepares the gas mixtures, but it also automatically calculates and reports maximum relative uncertainty for each delivered concentration.

The Audit Trail function performs complete traceability of the operations carried out.



TECHNICAL SPECIFICATIONS

- Number of channels: 2 to 6
- Inlet gas pressure: 3 bar(g) to 8 bar(g) maximum
- Outlet pressure: atmospheric up to 7 bar(g)
- Connections: Swagelok 1/8"
- Compatible gases: pure gases, concentrated mixtures, aggressive and reactive gases, with some exceptions (contact AlyTech or its representative for confirmation)
- Dilution factors up to 10⁸
- MFC Range: 2% to 100% of full scale.
- Flow accuracy: ±1% of the required value over the entire scale.
- Repeatability: less than 0.1% of the requested value
- Software: Run on Windows 10 or higher. Ethernet port Communication
- Operating temperature: 10 - 50°C
- Alimentation: 90-260Vac, 1,5-4A, 50-60Hz
- Dimension: L x l x h (cm): 45x22x38 (or 45x22x59 with options)
- Approximate weight: 14 kg (depends on configuration)

TYPICAL APPLICATIONS:

- Petrochemical – Calibration of GC, µGC, Elemental analysers, Spectrometers, ...
- Environmental – Calibration of ambient air monitor and gas detectors
- Food & Flavour – Quality control
- Specialty Gases – Customized secondary standards
- Research – Generation complex gas mixtures

*Note : Specifications subject to change without notice.

