



## **GMRACK**

# **Enhanced functionalities of GasMix™ in a 19" rack**

**The GMRack is the industrial version of the most popular laboratory Aiolos II gas mixer/diluter from AlyTech.**

Compatible with the standard 19" rack mount, this system accommodates up to 4 gas channels to make calibration gas mixtures directly at the production site or within the analyzer tower.

For easier use directly on site, the GMRack is equipped with on-board computer and a touch screen. Embedded GasMix™ software controls the mixer operation. It may drive an external injection valve and/or the Start command of an analyzer. The operator can do a single injection or run fully

### **BENEFITS :**

- 19" rack mounted industrial version of GasMix™
- Up to 4 gas channels
- Calibration curves for each used gas
- Complies to ISO 6145-7
- On-board computer and a touch screen for easier control on site
- USB port on front panel to upload projects
- Can be remotely driven by Ethernet communication

automated pre-programmed sequences for a linearity check or a multi-point calibration. A strong benefit of the GasMix™ is the drastic reduction of operator time.

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

- Optimizing the cost and efficiency of gas cylinders
- Reducing the number of necessary gas standards
- Managing cylinder expiration dates
- Reduction of operator bench time
- Increase productivity, safety and application flexibility



# Intelligent gas mixer / diluter with a remote or on-site control

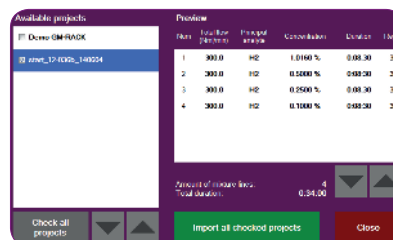
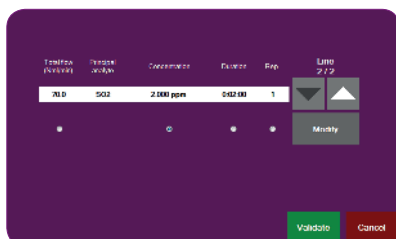
## Smart software

User-friendly and intuitive, the GasMix™ software helps to build fully automated, multi-step pre-programmed sequences for mixing/diluting. Routine procedures created by the user may be saved and recalled at any time. The system can be remotely controlled via Ethernet communication from a remote desktop computer with GasMix™ Software (PC software delivered in standard). Alternatively, library of standard, sequences and system configuration profiles can be pre-programmed on an external PC and transferred to the GMRack via USB port. The GMRack may drive an external injection valve and/or the Start command of an analyzer. A built-in Audit Trail function ensures a total traceability of operations carried out.

## Typical Applications:

GMRack creates in situ controlled gas concentrations for analyzer validation, calibration or linearization check, gas chromatographs,  $\mu$ GC, gas analyzers, FTIR, etc.

- Manufacturing – Test bench for gas sensors quality control, LOD-LOQ and linearity checks
- Environmental – Calibration of analyzers for ambient air surveillance, in laboratories and on site
- Biofuels – Calibration of biofuel characterization analyzers
- Automotive Industry – Engine bench and Emission Control
- Research – Generation of complex gas mixtures



## TECHNICAL SPECIFICATIONS

- Number of gas channels: 2 to 4
- Inlet Gas Pressure: 3 bars nominal, max 8 bars
- Outlet Pressure: atmospheric, higher on request
- Connections: Swagelok 1/8", other on request
- Gas compatibility: pure gases, concentrated gas mixtures, most of aggressive and reactive gases (for specifics, contact us)
- Mixing: mixing up to 4 channels simultaneously
- Dilution ratio of the initial concentration: up to 1:10000
- MFC operation range: 2 to 100% FS
- Flow accuracy:  $\pm 1\%$  of setpoint all over the scale
- Repeatability: less than 0.1% of setpoint
- Response time to the setpoint <5 sec
- Build-in computer with touch screen panel 5"
- Software: Embedded software + standard GasMix™ PC software provided
- On-site upload/download projects via USB port
- Can be remotely controlled via Ethernet link
- I/O relay or TTL communication with an external analyzer
  - Automatic regulation of output flow
  - Heated tubing for specific gases
  - Customized communications options
- Operation temperature: 10-50°C
- Power supply: 90-260Vac, 1,5-4A, 50-60Hz
- Dimensions: L x l x h: 48.3x34.5x18 cm (19"x13.6"x7")
- Weight: approx. 9 kg (depends on configuration)

\* Note: Specifications subject to change without notice