



### **GMRACK**

# GasMix<sup>™</sup> in a 19" rack with extra functionalities

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

Fitted into a standard 19 " rack mount , this system accommodates up to 6 gas channels, and makes 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 automated preprogrammed sequences for a linearity check, a multipoint calibration, or generation on-demand gas mixture.

The strong benefit of the GasMix<sup>™</sup> is the drastic reduction of operator time.

#### BENEFITS:

- Up to 6 gas channels
- Complies to ISO 6145-7
- Enhanced automation features
- On-board computer and a touch screen for easier control on site
- USB port on front panel to upload projects or remotely driven by a PC
- Optionally can be delivered without a touch screen (G-Rack model) remotely driven by GasMix software only via Ethernet communication

## The GasMix<sup>™</sup> provides an automated, cost effective way of on-site gas preparation and helps in following aspects:

- Optimization of the cost and efficiency of gas cylinders use
- Saving money by reducing the stock of necessary gas cylinders
- Offering accurate, automated and traceable quality procedures
- Reducing of operator bench time
- Increasing 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 6
- 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: ±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 analyze Optional:
  - 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 I x h: 48.3x34.5x18 cm (19"x13.6"x7")
- Weight: approx. 9 kg (20 lbs) (depends on configuration)

<sup>\*</sup> Note: Specifications subject to change without notice



