GASMIX™ by AlyTech

NOMAD

Portable gas mixer, diluter from AlyTech

This compact and intelligent instrument can assist you in routine quality procedures where you need it: in a lab, in a mobile lab or at a customer site.

The popular AlyTech GasMix™ technology is now available for field auditors, quality assurance engineers, laboratory researchers, CEM operators and air monitoring station operators who perform calibrations and verification of gas analyzers at remote locations.

Packaged in a rigid case and equipped with built-in industrial PC, the NOMAD operates under dedicated GasMix™ Windows software. A typical configuration includes 4 gas channels, that allows connection of 2 span gases, interference gas and dilution gas.

In this setup, the NOMAD is a full featured tool for multi-point span and zero calibrations, linearization, repeatability check, purity check, interference check and other applications.

BENEFITS :

- Compact, portable, and rigid
- Used for H_2S, SO_2, COS, NO, NO_2, CO, CO_2 and other gases
- Complies with ISO 6145-7
- Dedicated, user-friendly and intuitive software
- Unlimited number of concentrations
- Pre-programmed calibration sequences
- Manual start or full automation by synchronizing with an external analyzer
- Available in 3 or 4 channels configurations
- Rigorous metrology and traceability
- Can be controlled by built-in or external PC

GasMix™ can handle pure gases, concentrated gas mixtures, most of aggressive and reactive gases. It is compatible with active compounds like sulfur gases, or ammonia at trace level.

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

- Automation of calibration procedures
- Traceability and documenting of the operations
- Reducing the number of necessary gas standards cylinders
- Reduction of operator bench time

Unlimited gas concentrations by dilution for calibration, repeatability, and linearity checks

Dedicated software

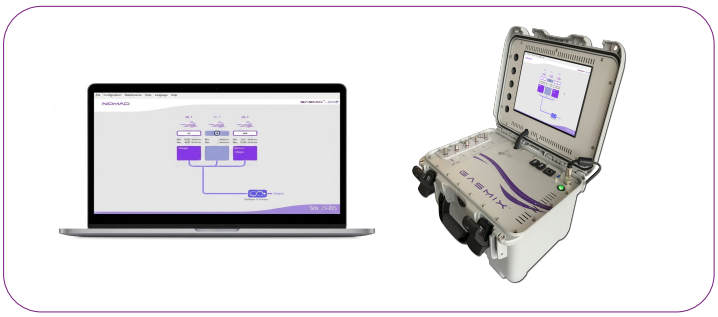
Made by experts, user-friendly and intuitive software allows the creation, modification, and storage of unlimited number of mixing/diluting projects, including not only a gas generation sequences, but also library of gas standards, MFC calibration tables, user settings, external analyzer control parameters, and more. No need for manual computations, the user defines concentrations of calibration points and the software calculates flow rate of each channel taking into account the initial concentration of parent gas and the range of the corresponding mass flow meter.

The operation is further simplified as routine procedures created by the user may be saved and recalled at any time. The Audit Trail function performs complete traceability of the operations carried out.

Metrology

Every individual Mass Flow Controller (MFC) used in GasMix™ instrument undergoes a rigorous factory calibration procedure with 20 setpoints across the whole operation range ensuring highest accuracy and linearity. Such high resolution calibration tables are stored in the software for every MFC 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 every delivered concentration.



There are two versions available - controlled by built-in or external PC

Typical Applications:

- Calibration of GC, µGC, gas analyzers
- Environmental – Calibration, repeatability, and linearity checks of automated measuring systems (AMS)
- Gas spectrometry - Validation, model building and calibration of FTIR, RAMAN and other spectrometers
- Customized secondary standards for calibration laboratories and inspections
- Research: Generation complex gas mixtures

TECHNICAL SPECIFICATIONS

- Number of gas channels: 3 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 gases 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
- Software: delivered with GasMix 3.1
- USB mouse and keyboard in option
- Remote connection Ethernet
- Operation temperature: 10 - 50°C
- Power supply: 24VDC provided with AC adapter
- Dimensions: L x l x h (cm): 43x32x24;
- Weight: approx. 10 kg

* Note: Specifications subject to change without notice

OTHER GASMIX PRODUCTS:

Zephyr: With its touch screen and intuitive interface, very simple in operation, this smart gas diluter is widely used for various applications that involve only 2 gases, without compromising high accuracy and repeatability.

LiqMix: An automated and cost-effective way to generate a standard gas from a liquid or liquid mixture down to ppb levels. Ideal for chemicals that are not commercially available in cylinders, like unstable, reactive compounds or complex multicomponent mixtures. Robust design, simple in use, fully automated operation.

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