



## HURRICANE

### Diluting – Blending up to 16 gases simultaneously!

**The most powerful in GasMix™ family, this gas mixer/diluter can automatically prepare and deliver complex gases to virtually all kinds of analytical instruments, reactors, or sensors.**

The principle is based on the dynamic mixture of 5 to 16 standard gases (customized systems for up to 20 gases are possible). No need for manual computations - for every desired output concentration the software does automatic calculation of dilution and span gas flows, even for very complex mixtures.

#### BENEFITS :

- Unique on the market
- Fully automated mixing system up to 16 gases simultaneously
- Operation with versatile GasMix™ PC software
- Ease to use even for very complex mixtures
- Complies to ISO 6145-7
- Calibration curves for each used gas
- Evolutionary system with possibility to add gas channels, calibrations, various options available

**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



# Versatile tool to make really complex gas mixtures

## Project management

The GasMix™ software allows the creation, modification and storage of all your projects, including not only a gas generation sequences, but also employed gas standards, MFC calibration tables, user settings, external analyzer control parameters, etc.

All sequences can be recorded and recalled at any time. An Audit Trail makes it possible to track all events during the operation.

## Automation

Rich remote control functionalities of GasMix™ software enable full automation by synchronizing the Hurricane and the external analyzer, like gas chromatograph, pre-concentrator, spectrometer, gas analyzer or other system. The user can easily automate the process by synchronizing dilutions, injection, flushing timings and store it in a preprogrammed sequence. Time of operator is therefore significantly reduced!

To respect the safety and the quality the Hurricane automatically stops mixing in response to alarms settings done by the user.

## Application areas for the GasMix™ Hurricane

include generation of complex synthetic gas mixtures for testing interferences, development and validation of chemo metrics models for FTIR, RAMAN and other spectrometers.

It is also used in :

- Manufacturing – Test bench for gas sensors quality control, LOD-LOQ and linearity checks
- Petrochemical, Oil & Gas laboratories - Calibration of RGA analysers
- Engine bench tests and Emission control
- Specialty Gases: customized secondary standards
- Research: Generation of complex gas mixtures



## TECHNICAL SPECIFICATIONS

- Number of gas channels: 5 to 16 (possibility up to 20)
- 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 20 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
- Software: PC Windows 7 or higher, Ethernet port communication
- Optional:
  - Automatic regulation of output flow
  - Heated tubing for specific gases
- Operation temperature: 10-50°C
- Power supply: 90-260Vac, 1,5-4A, 50-60Hz
- Dimensions: LxIxD (cm) : 66x45x17
- Weight: approx. 25 kg (depends on configuration)

\* Note: Specifications subject to change without notice



All controlled by a PC software

