GASMIX™ by AlyTech

ZEPHYR

Compact diluter with a smart software

On-site customized gas standard preparation has never been easier than with the Zephyr – a compact version of GasMix™.
One gas standard and infinite concentrations!

Due to its small size and embedded software, the Zephyr can be installed where you need it.

With its touch screen and intuitive interface, very simple in operation the Zephyr is widely used for various applications that involve only 2 gases. It can create multipont dilutions from a concentrated gas standard and a diluent, make gas sample steam dilution or be employed for supply of a synthetic gas atmosphere to a reactor or a glove box.

With an optional battery, the Zephyr can assure the interrupted gas supply during 8 hours, in case of main power cut-off or in a field operation.

BENEFITS :

- Compatible with aggressive gases and active compounds like trace sulfurs, ammonia, VOC

- Small footprint, transportable

- Autonomy 8 hours on internal battery (option)

- Built-in software, no need for a PC

- Intuitive interface, ease of use

- Smart Sequence Builder feature helps creation of multi-point curves in one click

- Memory for 10 multi-segments dilution sequences

- Calibration curves for each used gas

- Fully compliant with standard ISO6145-7

- Can communicate with an analyzer via dry contact or TTL

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

- Reduction of operator bench time

- Increase productivity, safety and application flexibility

Create Customized Gas Mixtures what you need, where you need, when you need

Examples of Applications:

• Linearity check and calibration of GC with FID, TCD, PID, PHID, SCD, MS and other detectors

• Calibration of gas analysers for refinery process control

• Linearity check and calibration of trace elemental analysers

• Validation / calibration of microGC for biogas characterisation

• Creation of controlled atmosphere in reactors for aging or oxidation

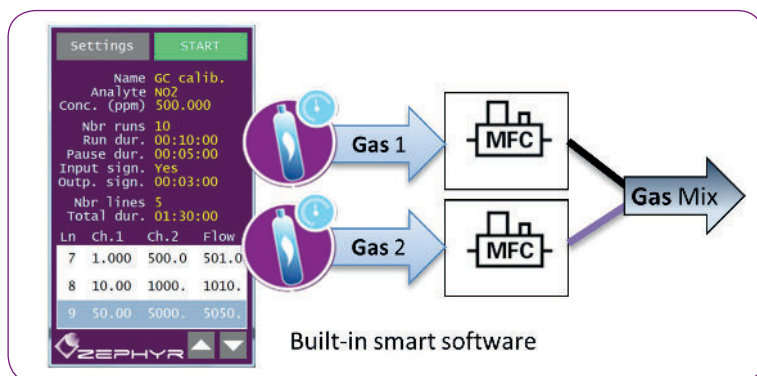• And much more applications

Smart Software

The dedicated software ZeSoft is fully automated and allows a single injection run or a fully automated and pre-programmed sequence. The sequences are stored in the memory and recalled at any time.

When the Zephyr, is used for the calibration of an analyser, accuracy of final concentration is very important. With the Zephyr uncertainty of the final gas concentration is calculated automatically taking into account the used flow and the certified uncertainty of the parent gas.

Unique Smart Sequence building

This feature helps the operator to make multi-point calibration curves easily.

User chooses the number of points, starting and ending concentration values, and the software calculates the respective concentration levels.

Portability

Equipped with optional rechargeable battery (autonomy up to 8 hours) and a support for two small gas cylinders, the Zephyr is ready for a field use. Typical 110L gas charge is sufficient for a linearity check or multipoint calibration of gas analyzers.

TECHNICAL SPECIFICATIONS

• **Number of gas channels: 2**
• **Inlet Gas Pressure: 3 bars nominal, max 8 bars**
• **Outlet Pressure: atmospheric, higher on request**
• **Connections: Swagelok 1/8" ,other on request**
• **Gas compatibility: In standard with Kalrez seals, stainless steel 316 tubing with inert coating. Compatible with most aggressive gases and active compounds like trace sulfurs, NO_2, ammonia, VOC (for specific cases, please contact us)**

• **Dilution ratio of the initial concentration: 1:2000 in standard /up to 10000 max**
• **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**

• **5" Color touch screen**
• **Embedded dedicated ZeSoft software**

• **Power supply: 90-260Vac, 1,5-4A, 50-60Hz**
• **Optional: NiCad rechargeable battery autonomy 8h**
• **Operation temperature: 10-50°C**
• **Dimensions : L x l x h (cm) : 38 x 16 x 26; Weight: 6,5kg**

* Note: Specifications subject to change without notice

Built-in smart software

Aly Tech