

## Smart Gas Diluter - Software at the core

Compact two-channel gas diluter for automated and repeatable gas mixture generation.

One gas standard and infinite number of concentrations!

All dilution calculations are performed internally, ensuring accurate, repeatable and fully traceable gas generation.

No external PC is required.



Compliant with ISO 6145-7

2 channels

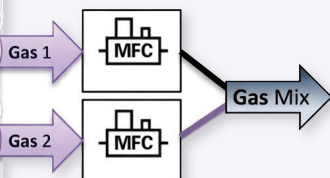
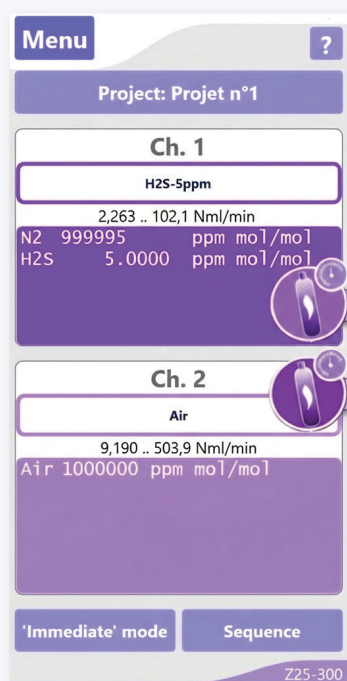
Intuitive Software

Automatic Uncertainty Calculations

Compatible with Aggressive Gases

## ZEPHYR II

Final concentration uncertainty is evaluated automatically, taking into account initial gas cylinder uncertainty and actual flow conditions.



## AlySoft at the Core

- Intuitive interface, easy to use
- Flow rate definitions for the required concentration
- Storage and recall of sequences
- Automatic uncertainty calculation
- Continuous quality follow-up
- Synchronization with gas analyzers for automated multipoint calibration routines
- Immediate mode enabling on-the-fly adjustments of flow rates or concentrations
- Sequences mode allowing automated execution of multipoint calibration of gas analyzers



# GAS MIXTURES. ON DEMAND

## Key Benefits

- Reduced number of gas standards
- Reduced operator handling
- Increased productivity and safety
- Sync with your analyzer for calibration automation

## Compact & Portable

- Compact, transportable benchtop system
- Installation directly at the point of use
- Operation from one gas standard and one diluent
- Optional internal rechargeable battery

## Technical Specifications

### Gas Channels

- Number of gas channels: 2

### Gas Compatibility

- Stainless steel 316 tubing with inert coating
- Kalrez® seals
- Compatible with aggressive gases and active compounds (trace sulfurs, NOx, ammonia, VOCs)

### Dilution Performance

- Dilution ratio: 1:2000 (standard) up to 1: 10 000 (maximum)
- Flow accuracy:  $\pm 1\%$  of setpoint \*
- Repeatability:  $< 0.1\%$  of setpoint \*
- Response time:  $< 5$  s

### Physical Characteristics

- Dimensions (L x W x H): 43 x 15 x 25 cm
- Weight: 6.5 kg

\* When MFCs operate between 10% and 100% of full- scale flow

\* See technical specifications for detailed physical characteristics.



### Pressure & Connection

- Inlet gas pressure: 3 bar(g) nominal (max.8 bar(g))
- Outlet pressure: Up to 7 bar(g)
- Connections: Swagelok® 1/8" (others on request)

### Interface & Control

- 7" color touchscreen
- Embedded dedicated AlySoft Software

### Power & Environment

- Power supply: 90-260 VAC, 50-60 Hz
- Optional internal rechargeable NiCad battery: up to 6 h autonomy
- Operating temperature: 10-50 °C

## Typical Applications - Examples

- Linearity verification and calibration of gas chromatographs equipped with FID, TCD, PID, PHD, SCD, MS and other detectors
- Calibration of gas analyzers for refinery and process control applications
- Linearity verification and calibration of trace elemental analyzers
- Validation and calibration of microGC systems for biogas characterization
- Generation of controlled atmospheres in reactors for aging, oxidation, or stability studies

(and other gas dilution and calibration applications)

## Contacts

☎ 331 69 56 07 17

✉ [gasmix@alytech.fr](mailto:gasmix@alytech.fr)

📍 3, rue Condorcet 91260 Juvisy sur Orge, FRANCE