



PerMix ATMO



Portable Multipoint Calibration Gas Generator

Based on permeation tube technology combined with precise mass flow controllers, and built-in purified air generator, PerMix ATMO is unique all-in-one calibration solution for laboratory, mobile labs or remote locations use.

This portable device contains all components to assure the autonomy of operation including built-in computer, air pumps, mass flow controllers, and rechargeable battery power supply. Large touch screen enables easy operation. Ethernet connectivity provides remote control. PerMix ATMO produces a very pure, accurate and repeatable calibration gas with programmed concentrations down to trace levels.

BENEFITS :

- Transportable and battery supplied
- Complies to ISO 6145-10
- Wide range of concentrations generated on-site
- Automated calibration sequences for linearity and repeatability checks
- Ready to use : temperature and flow maintained during transportation
- Robust design
- Ease of operation enables use by non-technical personnel

The PerMix ATMO provides an automated, cost effective way for on-site calibration and linearity checks of toxic gas detectors, automated measuring systems (AMS) to monitor emissions of greenhouse gases and air pollutants such as NO₂, SO₂, COS, BTEX, H₂S, NH₃, other gas analyzers and chromatographs. Self-contained for remote or field use it eliminates a need of multiple cylinders saving space, cost and removing safety hazard.

The PerMix ATMO is an ideal solution to generate calibration gas or mixtures of unstable or reactive compounds that are typically not available in cylinders.



Automatic permeation /dilution system with built-in zero gas generator

Self-contained

With two built-in pumps no cylinder supply is required: a low flow pump permanently sweeps permeation tubes to keep the concentration, one high flow pump (5L/min) provides zero air for dilution. Flow rates are adjustable by the software and regulated by precise mass flow controllers (MFC).

Versatile

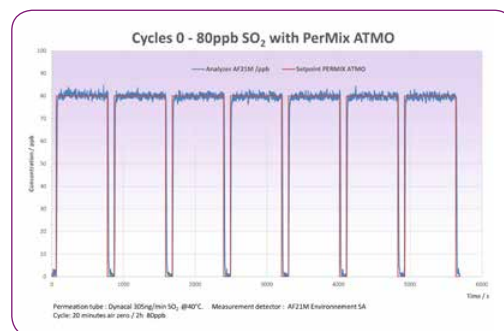
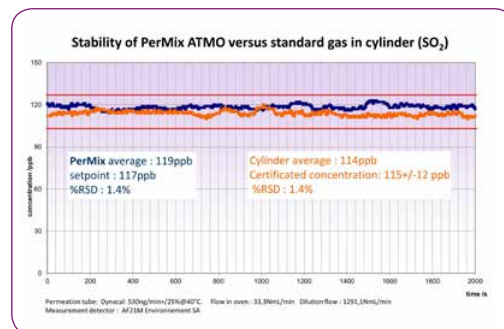
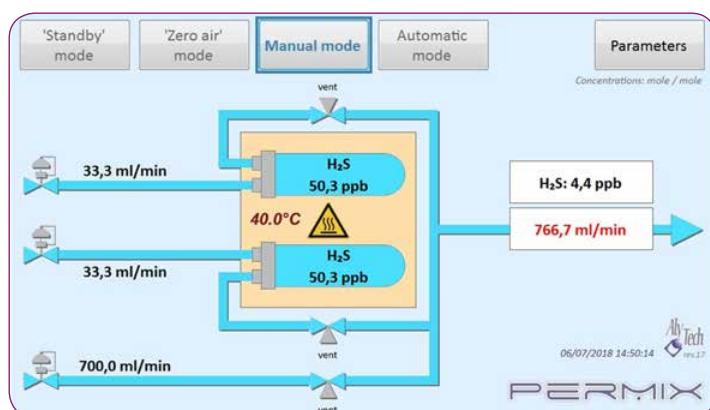
With dual ovens with adjustable temperature setpoint and regulated flow, the system can accommodate most of the permeation tubes available on the market. With the capability to regulate individually the air flow in each oven, it is possible to use of different permeation tubes to create multicomponent mixtures. In addition, the PerMix ATMO has built-in diluter that can provide a dilution factor up to 1:100 with output flow up to 3000NmL/min allowing wide range of concentrations.

Automated

Equipped with a touch screen and user friendly software the instrument operation is simple. The operator sets up a sequence with desired concentrations and the software determines dilution rates. When connected to the analyzer, the unit generates complete calibration program without operator intervention.

Time saving

Even during transportation the PerMix ATMO maintains operation conditions using its own power source: ovens are maintained at the temperature and purified air flow constantly sweeps the permeation tubes. When arriving on site just 2 to 3 minutes are necessary to switch the pump, stabilize the setpoint and calibration can be fulfilled without delay significantly saving the operator time compare to the traditional method.



TECHNICAL SPECIFICATIONS

- Nb of permeation ovens: 2
- Oven temperature: adjustable 40°C to 70°C
- Oven T° stability: ±0.1°C
- Dilution gas: purified air; built-in pump 5L/min
- Filters: particles, humidity, charcoal
- Accuracy: <1.5% ; Repeatability: <1%
- Max output flow: 3000 NmL/min
- Connectors: Swagelok 1/4" other on request
- Internal power supply: NiCad rechargeable battery autonomy 8h
- External power supply: 90-260Vac, 1,5-4A, 50-60Hz (Battery power during transportation, AC power on site)
- Presentation: Robust transportable case
- Weight: 14 kg

* Note: Specifications subject to change without notice