

SONIMIX 2106

Best in class Gas Mixer with the unique sonic nozzle technology

The **Sonimix 2106** is a gas mixer mainly used to calibrate and linearize gas monitors and to generate specific gas mixtures .

The **Sonimix 2106** is based on the principle of gas flow through sonic nozzles and is built according the ISO 6145/6 standard. The sonic nozzle principle makes it the most accurate and stable device on the market. It generates binary mixtures from 0 to 100% in fixed steps in a pure mechanical process without electronic regulation and without any influence from ambient pressure or temperature.

The touch-screen LCD interface provides simple and user-friendly management of all functions on the unit.

Optional Auto Diagnostic functions for quick check of the instrument performances (patented) is available. Optional NOx converter tester.

Proven metrological performances – Optional ISO 17025 calibration reports will be delivered from our accredited laboratory. In this way the device can be easily linked with National Standards (NIST, METAS, UKAS, etc)

Main applications

- Quality control of gas monitors in the laboratory
- Gas analysers and sensors production
- To generate accurate gas standards and mixtures for R&D purpose
- Automotive industry for engine test benches

Main advantages

- ✓ Fulfilment of ISO 14481 standard CEM (QUAL 1 to QUAL 3)
- ✓ ISO 6145/6 standards
- ✓ High accuracy (0.5% rel.) and stability (0,2% rel.)
- ✓ Constant gas flow and pressure
- ✓ No break-in times
- ✓ Up to 1024 programmable calibration points.
- ✓ Low maintenance
- ✓ Cost savings – Reduce gas cylinders costs
- ✓ Corrosive gases can be used with the optional SilcoNert © coating
- ✓ Safe - Smart purge routine
- ✓ Remote control
- ✓ Ergonomic with LCD display





Specifications

Models: Sonimix 2106	2106-10	2106-16	2106-64	2106-128	2106-256	2106-1024
General data						
Dilution points	10	16	64	128	256	1024
Dilution principle	Sonic nozzles (according ISO 6145-6) and high precision pressure regulators					
Dilution gas line flow accuracy	< 0.25 % of set point					
Source gas line flow accuracy	< 0.25 %					
Repeatability on flow	< 0.1 %					
Accuracy on concentration (rel)	< 0.5 % on the highest dilution ratio					
Repeatability on concentration	Better than 0.14% relative					
Response time	< 15 sec					
Auto Diagnostic	Diagnostic of pressure regulator, valve opening, nozzle functioning, drift					
Factory calibration	By laminar flow with uncertainty < 0.2% of reading					
Warm up time	none					
Operating temperature	15°C - 40°C					
Dimensions	19" 3HE/84 TE , 500mm deep portable casing in option					
Net weight	15 - 20 kg					
Gas inlet requirements						
Dilution gas	Requires dry Air, Nitrogen or other gas, 2 ports					
Dew point	-40°C					
Source gas	compatible with corrosive gases up to 10% (if option installed), up to 12 ports					
Pressure	3 ± 0.3 bar rel					
Fittings	3 x Swagelok 1/4" (Air, Nitrogen, Span gas), optional up to 3x Swagelok 1/4" per instrument					
Gas outlet requirements						
Flow	2.5 ± 0.25 L/min (other flow rate upon request) adjustable by by-pass valve in front of the instrument					
Pressure	up to 1 bar rel (other pressure upon request)					
Fittings	4 x Swagelok 1/4" (Mixture, Waste, Purge)					
Communication						
RS 232	Standard					
Ethernet TCP/IP	Standard					
USB	Standard					
WiFi	Optional					
Electrical data						
Power supply voltage	230V/50-60Hz 115V/60Hz 100V/50-60Hz					
Installed power (Max)	150W					
NOx converter tester (option)						
NO ₂ range	15 to 50 ppm / 30 to 100 ppm / 300 to 1000 ppm, all at 2.2 NL/min					
Stabilization time	Less than 1 min (once the device has warmed up)					
Inlet fittings	2 x Swagelok (NO, air) 1/4"					
Outlet fittings	2 x Swagelok (outlet, purge) 1/4"					



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