



Schmidlin
Swiss Made  Innovation



**Gas dividers
gas mixers
gas calibration systems
for Emission, Process
and Automotive**



Gas Dividers, Gas Mixers, Gas Blenders

The Sonimix 2106 has been developed to perform linearity check of gas analysers. Due to the simultaneous use of high precision pressure regulators and sonic nozzles, this instrument is able to reach high accuracy and repeatability. The Sonimix is available in a gas divider line from 10 to 1024 steps giving a dilution range of 0.1% to 100% with high accuracy. Due to its serial interface it allows to remote control the automatization of the linearisation process. It can mix any gas cylinders (corrosive or non corrosive). The sonimix 2106 gas divider is used by the major manufacturer of analysers to perform linearisation check and quality control of their instruments. The use of the Sonimix 2106 will generate a rapid return on investment and will soon become an indispensable working tool. Easy to use, the Sonimix 2106 is a "must" for the calibration. The NOx converter tester is available as option. **New option : Auto Calibration.**

Sonimix 2106

	Models Sx 2106-10 Sx 2106-16 Sx 2106-128 Sx 2106-256 Sx 2106-1024 Sx 2106-2x10 Sx 2106-3x10 Sx 2106-Pre-Dil	Dilution by sonic nozzles 10 dil. points 10% to 100% in 10% steps 16 dil. points 6% to 100% in 6% steps 128 dil. points 1% to 100% in 1% steps 256 dil. points 0.5% to 100% in 0.5% steps 1024 dil. points 0.1% to 100% in 0.1% steps 2x10 dil. points 1% to 10% + 10% to 100% 3x10 dil. points 0.1% to 1% + 1% to 10% + 10% to 100% Dilution rates 100%, 10%, 1%, 0.1%
	Options Auto Calibration Corrosive compatibility NOx converter tester 4 additional inlets RS232 remote cmd Portable casing ISO 17025 Calibration GasCal PC Software	Accuracy of $\pm 0.5\%$ relative

The Sonimix 7000 is a gas divider using the well known technology of Mass Flow Controllers (MFC). Although it needs a more frequent recalibration compared to the sonic nozzles technology, this instrument will give the highest flexibility at a very competitive price. The Sonimix 7000 exist into 2 configurations, the multi range (binary mixture only) or as multi gas (mixture of up to 5 gases + a balance at the same time). The multi gas configuration is very useful for the calibration of multi-component analysers or for interference test.

Sonimix 7000

	Models Sx 7000 2L1R Sx 7000 2L2R Sx 7000 2L3R Sx 7000 Multi Gas	Dilution by Mass Flow Controllers Dilution range from 10% to 100% Dilution range from 1% to 100% Dilution range from 0.1% to 100% Can mix up to 5 gases + 1 balance together / GasCal & RS232 included
	Options 4 additional inlets RS232 remote cmd Portable casing ISO 17025 calibration GasCal software	Accuracy of $\pm 2\%$ relative

NOx Converter Tester

The Sonimix 2130 is the ideal device to test the efficiency of a NOx converter. With its built in ozone generator and the use of NO cylinder, it's easy to generate stable value of NO and NO2. This technology is regularly used in Emission and Automotive applications. This device uses the US EPA method to test NOx converter.

Sonimix 2130

	Models	Nox Converter tester	Portable casing
	Sx 2130-50 SX 2130-100 Sx 2130-1000	NO2 generation from 5 to 50 ppm NO2 generation from 30 to 100 ppm NO2 generation from 300 to 1000 ppm	

Permeation Calibration system

Sonimix 3030

	Models	Modular calibration system	
	Sx 3030 DIL 1PT Sx 3030 PERM1T1PT SX 3030 PERM6T1PT	1 dilution point 1/250 @ 3.5 l/min*	1 Permeation oven for 1 tube / 1 concentration 1 Permeation oven for 6 tubes / 1 concentration
	Options		
	Portable casing		* other dilution on customer request

Components

Pressure Regulators



Aluminum or
Stainless Steel
P stability ± 2 mbar

Sonic Nozzles



Flow rates from
1Nml/min to 30Nl/min

Permeation Tubes



Large range of
components

Calibration ISO 17025



LNI Schmidlin SA laboratory is able to measure flow rate and deliver ISO 17025 calibration certificates. Today, the quality insurance is a must. ISO 9001 request that all the measuring devices are regularly checked and linked to the national standards. Normal calibration is good, but the ISO 17025 will give the assurance that the device has been correctly linked to national standard. The ISO 17025 certificates confirm the measurements, the uncertainty and the condition of measurements as well as the full traceability.

These certificates are recognized by all ILAC members (COFRAC, DKD, SAS, SIT, UKAS,...).

GasCal

This PC software will increase the capability of your sonimix gas divider. It allows performing mixtures with multigas cylinders, to "save" and "load" pre defined repeatability and linearity check procedures. This software will help in the automation of the process and save a lot of time.



Gas Generators

Generating gases by yourself has numerous advantages :

- no empty cylinders with rental costs and long delays in replacement
- no need of expensive pressure reducer

In order to offer the best possible products, LNI Schmidlin SA has developed a wide range of gas generators (nitrogen, hydrogen, zero air). Very easy to use and reliable, the gas generators are the right alternative to cumbersome and expensive gas cylinders. They are very secure producing only the requested quantity of gas (no gas storage).

The quality of the gas is compatible to the most common applications : the hydrogen / air to aliment a FID or GC, the air to feed in carrier gas the sonimix gas dividers and the nitrogen to aliment PID detectors.

Sonimix 3080

	Models	Purity 99.99% / 0.5 to 6 bar	
	Sx 3080-100 Sx 3080-160 Sx 3080-250	100 ml/min of hydrogen 160 ml/min of hydrogen 250 ml/min of hydrogen	
	Options		
	H2 Dryer Zero Air Generator CH4 Scrubber	H2 purity of 99.999% up to 5 L/min CH4 < 50 ppb	

Sonimix 3060

	Models	Purity 99.9995% / 0.5 to 4 bar	
	Sx 3060-100 Sx 3060-200	100 ml/min of nitrogen 200 ml/min of nitrogen	
	Options		
	CH4 Scrubber for N2 Zero Air generator	CH4 < 50 ppb SO2 / O3 / NO / BTEX < 0.5 ppb, HCnm < 50 ppb, H2O < -50°C DP (-40°F)	

Sonimix 3052/3057

 	Models	Self Regenrable System / up to 4 bar	
	Sx 3052/3057-5 SX 3052/3057-10 Sx 3052/3057-30	5 l/min air 10 l/min air 30 l/min air *	
	Options	SO2 / O3 / NO / BTEX < 0.5 ppb, HCnm < 50 ppb, H2O < -50°C DP (-40°F) CO2 < 5 ppm	
	CO/CH4 Scrubber CO Scrubber Portable casing	CH4 < 50 ppb / CO < 50 ppb CO < 50 ppb	

*need external compressed air



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