



**Datasheet 20140905** 

# Sonimix 2106 LCD Gas divider / Gas mixer

## **Description**

The binary gas divider from 0 to 100% in fixed steps, model **LNI SONIMIX 2106-LCD** is based on the principle of gas stream through sonic nozzles (ISO 6145-6 technology) and is built according to the ISO 6145/6 normalization.

#### Most accurate device on the market (0.5% rel.)

SONIMIX 2106-10 – from 10% to 100% in 10% step SONIMIX 2106-16 – from 6% to 100% in 6% step\* SONIMIX 2106-64 – from 2% to 100% in 2% step\* SONIMIX 2106-128 – from 1% to 100% in 1% step\* SONIMIX 2106-256 – from 0.5% to 100% in 0.5% step\* SONIMIX 2106-1024 - from 0.1% to 100% in 0.1% step



Internal Wifi Capabilities

# **Auto Calibration and Auto Diagnostic Systems**

### **Functioning principle:**

The sonimix 2106 gas divider perform a large range of gas mixtures from high concentration gas cylinders. It makes automatic calculation in function of the used gas types. Some models are available with Auto Calibration and Auto Diagnostic functions. The Sonimix 2106 is totally compatible with the US EPA methods and can be easily linked with National Standards (NIST, METAS, UKAS...)

The precision, stability and reproducibility of the generated mixtures are due to the joint use of sonic nozzles and high precision mechanical pressure regulators.



High accuracy and stability

Remote command or Wifi Capabilities

Mo maintenance

Compatible with corrosive gases

Smart Auto calibration and Auto Diagnostic systems\*

# **Applications**



The SONIMIX 2106 is mainly used to calibrate and linearize Gas Monitors:

- As reference in automotive industry to linearize the exhaust Emission test benches
- At the Stacks to fulfill the ISO 14 481 normalization
- In the laboratory to perform the quality control of gas Monitors
- To calibrate gas monitors / gas sensors manufacturer
- To generate specific atmospheres.

## **Specifications**

Flow rate: 2.5 L/min +/- 10% (other flow rate upon request)
Dilution Steps: 10 / 16 / 64 / 128 / 256 / 1024 depending of the model

Dilution by High precision Pressure regulator and sonic nozzles (ISO 6145-6 technology)

Carrier Gas: Requires dry (-40°C DP) Air, Nitrogen or other carrier gas

Auto Diagnostic : Diagnostic of pressure regulator, valve opening, nozzle functioning, drift

Premixed gases: Compatible with corrosive gases up to 10% (if option installed)

Accuracy: better than 0.5% relative / repeatability better than 0.2% relative

Pressure: Inlets: 3 bar rel / outlet up to 1 bar rel (other pressure upon request)

Fittings: Swagelok 1/4"

Tightness: < 10 (exponent) -7 mbar l/s verified by He detection

User interface: LCD touch pad graphic display

Remote command: RS 232 / ETHERNET/ USB (USB only for log file download or software update), Wifi on option

Warm up time : immediate

Stabilization time: less than 1 min (once the device has warmed up)

Power consumption: max 150 [Watt]

Power requirements: 230V/50-60Hz - 115V/60Hz - 100V/50-60Hz

Dimensions [cm]: 19" 3HE/84 TE , 500mm deep / portable casing in option

Shipping Dim [cm]: 41x51x50 (WxDxH)

Net weight [kg]: 15 to 20 Kg depending on model Shipping weight [kg]: 17 to 22 Kg depending on model

## Options - Accessories - Spare parts

Sonimix 2106 article numbers: 6800 0A BCC. D

A = Auto Cal & Diag*	B = Gases	CC = Total Flow	D = Nb of Points
0 = no Auto Cal & Diag	0 = standard gases	25 = Total flow 2.5NI/min +/-10%	10 = 2106-10
1 = with Auto cal & Diag	1 = corrosive gases	50 = Total flow 5NI/min +/-10%	
*Only for 16, 32, 64, 128, 256 & 512			1024 = 2106-1024
points			

Example: 6800 01 150.256 = Sonimix 2106-256 for corrosive gases with Auto Cal, flow 5 NI/min

#### **Options:**

6700 05 103.1 4 Diluted additional inlets (max 3x4 inlets or max 1x4 if Nox converter tester installed)

6800 10 000	Portable casing		
6809 00 300	PC software to drive the SONIMIX 2106	6700 13 867	Voltage 230V / 50/60 Hz
6800 00 900	Internal Wifi capabilities + Note Pad	6700 13 868	Voltage 117V / 50/60 Hz
6800 00 901	Internal Wifi capabilities	6700 13 869	Voltage 100V / 50/60 Hz

6704 08 073.3 ISO 17025 Calibration certificate

6800 02 000 NO2 converter tester 5 to 50 ppm, remote command by RS232. Vacuum to 1 bar rel.

NO2 converter tester 25 to 100ppm, remote command by RS232. Vacuum to 1 bar rel.

NO2 converter tester 300 to 1000ppm, remote command by RS232. Vacuum to 1 bar rel.

#### **Consumables:**

6704 08 551 Set of inlet filters (5 pces)

