# **SONIMIX 6000 C1**

## Permeation multigas calibrator

The multipoint multigas calibrator **SONIMIX 6000C1** is an instrument designed to calibrate manually or by remote control up to 5 gas monitors installed in an Air pollution monitoring station, such as SO2, HC or BTX, CO, NOx and O3.

With the optional Ozone generator and GPT circuitry it is possible to verify the coherence of NO, NO2 and O3 analysers, and to determine the converter's efficiency of the NOx monitors.

The interface allows to Configure the calibrator and to perform the manual operations of calibrations and GPT necessary after the maintenance process on the analysers.

Equipped with a binary gas mixer, based on high precision mass flow controllers and mechanical pressure regulators the **SONIMIX 6000C1** can generate accurate dilution to low ppb level. Options :

- Permeation oven of different sizes and material (up to 3 permeation oven per device), with a specific oven able to contain up to 6 BTEX permeation tubes.

- Ozone generator and GPT circuits.

#### Main applications

■ Air pollution monitoring

#### Main advantages

- ✓ Permeation
  - ✓ Mass Flow Controller technology
- ✔ Remote control
- ✓ Ergonomic with LCD display



R Evolution in Gas Calibration Systems



### Specifications

Models: Sonimix 6000 C1	
General data	4/4000 + 4/20
Dilution range	1/1000 to 1/30
Dilution principle	MFC
Dilution gas	Mixtures of : SO2 in air (25 to 100ppm), NO in N2 (25 to 100ppm), CO in air (1000 to 10000ppm), HC or BTX in air
Diluted gas flow	0 to 35 Nml/min air
Dilution gas line flow accuracy	0,5% rel + 0,1 FS
Repeatability on flow	0,2% rel + 0,1 FS
Warm up time	< 45 min
Stabilization time	< 1 min
Operating temperature	5°C - 40°C
Dimensions	19" 3HE/84 TE , 500mm deep portable casing in option
Net weight	15 - 20 Kg
Gas inlet requirments	
Carrier gas	High grade zero air from pressurised cylinders or from Sonimix 3057
Air Flow	0 to 5000 Nml/min air
Pressure	3 +/- 0.3 bar (35+/- 5 psig)
Air Fittings	1/4" and 1/8" Swagelok
Gas outlet	
Flow:	0,5 to 5 l/min, other values upon request
Fittings	1/4" Swagelok
O3 section	
O3 concentration	50 - 500ppb, adjustable by software, remote & local
	(other values upon request)
Repeatability on flow	Better than +/- 2ppb (at 200ppb O3)
Permeation tubes section	
SO2 permeation tube	50 to 250 ppb (standard values)
NO2 permeation tube	100 to 500 ppb (standard values)
BTX permeation tube	10 to 50 ppb (standard values)
Temperature of permeation tube oven	45°C
Temp. Stability of permeation	
tube oven	0.05°C
Communication	
RS232	Standard
Electrical data	
	230V/50-60Hz
Power supply voltage	115V/60Hz
	100V/50-60Hz
Installed power (Max)	200W



LNI SWISSGAS www.lni-swissgas.eu