

# SONIMIX 6000 C2

## Multi-points Multigas calibrator with GPT, ozone & self re-generable zero air generator

The multigas **Sonimix 6000 C2** calibrator is designed to calibrate manually or by remote control up to 6 monitors installed in an air pollution monitoring station, for parameters such as SO<sub>2</sub>, HC, BTX, CO, NO<sub>x</sub> and O<sub>3</sub>.

The Sonimix 6000 C2 includes Mass Flow Controllers, GPT, ozone and self re-generable zero air generator and is equipped with

- an inlet for high concentration mixtures of diluted gases such as NO, NO<sub>2</sub>, SO<sub>2</sub>, CO, HC, BTX or mixtures of several compatible pollutants in the same cylinder.

- a zero air generator composed of an internal compressor with self re-generable filters, removes following components: moisture, O<sub>3</sub>, NO<sub>x</sub>, SO<sub>2</sub>, HC, BTX and optionally CO and CH<sub>4</sub>.

- a binary gas dilutor of two inlets (diluted gas and air), including 2 Mass Flow Controllers to generate the zero and other dilutions ratios going from 1/100 to 1/1000 (other values upon request).

The input pressures are monitored by two pressure switches. The ozone generator is regulated by UV-light feedback and is compensated from the atmospheric pressure and ambient temperature variations. It includes alarm on the UV power drift as well as the circuits for the Gas Phase Titration (GPT).

### Main applications

- Air pollution monitoring

### Main advantages

- ✓ Accuracy - (0,6% rel.)
- ✓ No maintenance nor pressurised air cylinder with its included self re-generable zero air generator
- ✓ Sonic nozzle technology
- ✓ Remote control
- ✓ Ergonomic with LCD display





## Specifications

<b>Models: Sonimix 6000C2</b>	
<b>General data</b>	
Dilution range	From 1/100 to 1/1000 (50 to 500 ppb with a 50 ppm cylinder)
Dilution principle	MFC
Dilution gas	Mixtures of SO <sub>2</sub> in Air - NO in N <sub>2</sub> - CO in Air - HC or BTX in Air Mixtures of several compatible pollutants in the same cylinder
Diluted gas flow	0 to 35 Nml/min air
Dilution gas line flow accuracy	+/- 1.5% relative
Repeatability on flow	< 0.5% relative
Stabilization time	< 5 min
Internal O <sub>2</sub> air quality	SO <sub>2</sub> & O <sub>3</sub> < 1 ppb - NO & NO <sub>2</sub> < 2 ppb - HCnm < 50 ppb HCm < 50 ppb - CO < 50 ppb - BTEX < 1 ppb
Remaining humidity level	H <sub>2</sub> O < 100 ppm (-40°C DP)
Dimensions	19" 3HE/84 TE, 500mm deep portable casing in option
Net weight	20 Kg
<b>Gas inlet requirments</b>	
Carrier gas	High grade zero air from internal zero air generator
Flow	0 to 3500 Nml/min air
Pressure	3 +/- 0.3 bar (40 +/- 4 psig)
Fittings	1/4" and 1/8" Swagelok
<b>Gas outlet requirments</b>	
Flow:	About 3000 Nml/min, other values upon request
Fittings	1/4" and 1/8" Swagelok
<b>O<sub>3</sub> section</b>	
O <sub>3</sub> concentration	25 - 500ppb, adjustable by software
Repeatability on flow	Better than +/- 2,5ppb (at 250ppb O <sub>3</sub> )
<b>MFC section</b>	
Linearity and accuracy of the MFC	0.5 % (rel.) + 0,1 FS
Repeatability of the MFC	0.2 % (rel.) + 0,1 FS
<b>Communication</b>	
RS232	Standard
<b>Electrical data</b>	
Power supply voltage	230V/50-60Hz 115V/60Hz 100V/50-60Hz
Installed power (Max)	200W