

SONIMIX 7100

MFC Gas Mixer

The **Sonimix 7100** is a gas mixer mainly used to calibrate and linearize gas monitors and to generate specific gas mixtures .

The **Sonimix 7100** is based on the principle of gas flow through MFC (Mass Flow Controllers) and is built according the ISO 6145/7 standards. This instrument provides a very high flexibility allowing to combine multigas mixtures (up to 5 gases + a balance gas) and multi-range functionality.

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

All models make automatic calculation in function of the used gases types. The **Sonimix 7100** is totally compatible with the US EPA methods and can be easily linked with National Standards (NIST, METAS, UKAS...)

Each mass flow controller is factory calibrated in 10 points by a traceable primary standard.

Main applications

- Quality control of gas analysers and sensors
- Gas analysers and sensors production
- Interference measurement

Main advantages

- ✓ Fulfilment of ISO 14481 standards CEM (QUAL 1 to QUAL 3)
- ✓ ISO 6145/7 standards
- ✓ High accuracy - (2% rel.)
- ✓ constant gas flow and pressure
- ✓ high dilution range - 0.1% to 100%
- ✓ No maintenance
- ✓ Cost savings – Reduce gas cylinders costs
- ✓ Corrosive gases can be used with the optional SilcoNert © coating
- ✓ Remote control
- ✓ Ergonomic with LCD display





Specifications

Models: Sonimix 7100	Sx 7100 2L1R	Sx 7100 2L2R	Sx 7100 2L3R	Sx 7100 Multi Gas
General data				
Dilution range	10 – 100 %	1 – 100 %	0,1 – 100 %	At configuration, mix up to 6 cylinders
Dilution principle	Mass Flow Controllers			
Dilution gas line flow accuracy	0.5 % (rel.) + 0,1 FS			
Source gas line flow accuracy	0.5 % (rel.) + 0,1 FS			
Repeatability on flow	0.2% (rel.)+ 0,1 FS			
Accuracy on dilution	Better than 2% (rel.) according to ratio dilution			
Warm up time	< 45 min			
Stabilization time	less than 1 min (once the device has warmed up)			
Tightness	< 10-7 mbar l/s verified by He detection			
Operating temperature	15°C - 40°C			
Dimensions	19" 3HE/84 TE , 500mm deep portable casing in option			
Net weight	15 - 20 Kg			
Gas inlet requirments				
Dilution gas:	Requires dry (-40°C DP) Air, Nitrogen or other carrier gas			
Source gas:	compatible with low corrosive gases			
Pressure	3 ± 0.3 bar rel			
Fittings	Swagelok 1/4"			
Gas outlet requirments				
Flow:	3.5 L/min (other flow rate upon request)			
Pressure	atm + 150 mb max (other pressure upon request)			
Fittings	Swagelok 1/4"			
Communication				
RS 232	Standard			
Ethernet TCP/IP	Standard			
USB	Standard			
Electrical data				
Power supply voltage	230V/50-60Hz 115V/60Hz 100V/50-60Hz			
Installed power (Max)	65 - 150W			