

SONIMIX 3080

Hydrogen and (optional) Zero Air Generators

The **SONIMIX 3080** is an instrument composed of an **Hydrogen** generator as well as a **self regenerable Zero Air** generator. The two modules are complementary and make this instrument an **indispensable** tool for the alimentation in Air and Hydrogen of all FID, BTEX, VOC and gas chromatographs.

The utilisation of the SONIMIX 3080 avoid the use of two cumbersome and expensive gas cylinders.

The instrument internal program and processor assure the control of both generators and allow to check on line various functioning's parameters such as: water level, pressure outlet (H2 and AIR), electrolyses current, CH4 oven temperature (if option 11 installed),... The display and keyboard allow a simple and intuitive use of the instrument. The functioning parameters and the alarm can be monitored through the RS 232 remote command as well as through one dry relay.



- ✓ **Compact / small in size**
- ✓ **No cylinders**
- ✓ **Economic**
- ✓ **Original / Swiss made**

Hydrogen Generator	Zero air generator
<p>The hydrogen generator use the latest membrane technology available for the production of electrolytic hydrogen. This technology is preferred to other techniques because it requires less maintenance and does not use dangerous caustic solutions.</p> <p>The suppression of dead volumes (<100 ml) as well as an "on demand generation" avoid the stock of large quantity of hydrogen and enable the use of this instrument in area where hydrogen cylinder are restricted.</p> <p>Functioning's principals : The hydrogen is produced with the electrolyse of the water going through a membrane in polymer. The electrolyse cell is alimented by distilled water contained in the intermediate internal tank, which is alimented by the main external tank. The produced hydrogen is dried and pressure regulated (the pressure value can be defined by the user or by RS 232). The external water tank inlet as well as the H2 outlet are located on the rear face of the instrument.</p> <p>Security: In case of wrong internal functioning or the opening of the H2 circuit, the production of H2 is stopped and an alarm is activated (automatic leak check)</p>	<p>The Zero Air generator main function is to filter, pump dry and purify the ambient AIR of the Hydrocarbon (as well as the CH4 if the option 11 is installed) and the humidity.</p> <p>This purified AIR can be used to aliment with quality Zero air (combustive) an FID or Chromatograph. Or if the OP 12 is installed to aliment a calibration system or perform the Zero of the Analyser.</p> <p>Functioning's principals : The ambient air, cleaned of its dust, is pumped to 8 bar, it goes through a cooler and a condenser with automatic drain system. The filtration of the various pollutants and non-methane hydrocarbons is made with the help of an self regenerable system functioning on the pressure swing and reverse flow principle. When a part of the generator is filtering, the other part regenerates itself. In option (Op11), a catalysis oven allow to eliminate the CH4 and the CO.</p> <p>A fine dust filter and an electronic pressure regulator terminate to condition the Air.</p> <div style="text-align: center;"> </div>



Technical characteristic

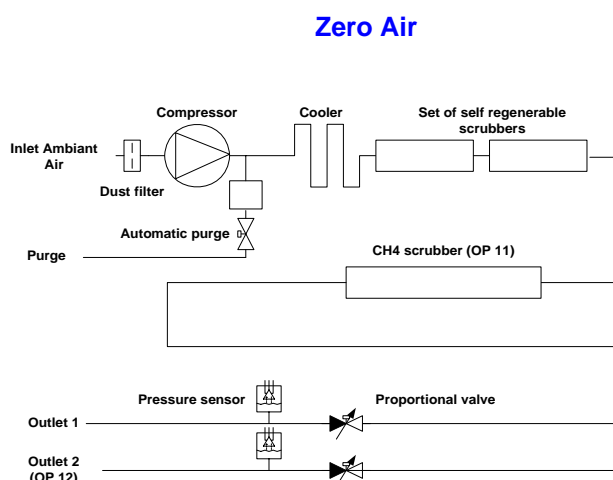
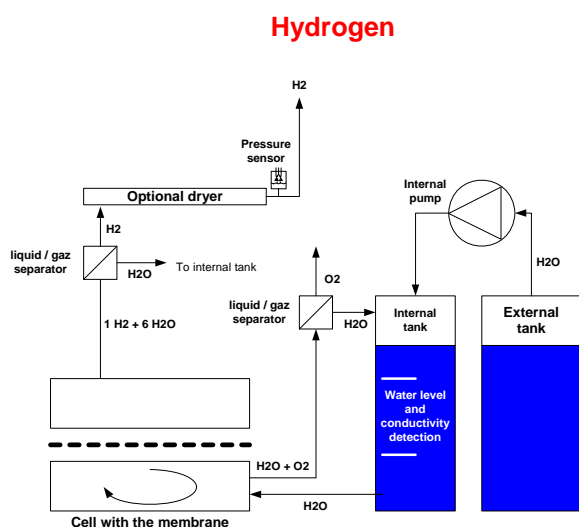
Hydrogen generator		Zero air generator	
Outflow generated	100; 160 or 250 Ncc/min according to model	Outflow of generated Zero air	1 to 5 litres/minute at the atmospheric conditions
Outlet pressure	adjustable between 0.1 and 6 bar	Outlet pressure	1 outlet Adjustable between 1 and 3.5 bar Internal tank 1.5 L
Purity	> 99.99% Humidity : < - 30°DP	Remaining pollutants level	HCnm < 50 ppb HCm < 50 ppb (if OP11 installed) BTEX < 1 ppb
	>99.999% (if OP2 installed) Humidity : < - 60°DP		Remaining Humidity level
Life time of the de-ionizer bag	6 months	Approximate life time of filters	Preventive maintenance, once a year
Life time of the dryer (OP2)	Depending on use		

Display / Keyboard	Vacuum Fluorescent Display 2x20 lines /18 keys
Remote command	RS 232
Weight	15 to 30 Kg (depending on options)
Case	19" , 3U, 500mm

Article Numbers, Options and accessories :

No Article	Description	No Article	Description
670021001	SX 3080OP1.1 : 100 Ncc/min flow H2 max	670021010	SX 3080OP10 : Zero Air Generator (5NI/min)
670021002	SX 3080OP1.2 : 160 Ncc/min flow H2 max	670021051	SX 3080OP10AC1 : consumables for the annual maintenance of the ZAG
670021003	SX 3080OP1.3 : 250 Ncc/min flow H2 max	670021052	SX 3080OP10AC2 : membranes of the compressor
670021040	SX 3080OP1AC1 : Dionisation bag	670021012	SX 3080OP11 : Scrubber for CH4
670021042	SX 3080OP1AC2 : External additional water tank	670021056	SX 3080OP11AC1 : consumables for CH4 scrubber
670021080	SX 3080OP1.1AC9 : Stand. Exchange cell H2 100	670021054	SX 3080OP11C2 : Heating element / CH4
670021081	SX 3080OP1.2AC9 : Stand. Exchange cell H2 160	670021014	SX 3080OP12 : additional outlet to aliment a calibration system or perform the zero of the FID
670021082	SX 3080OP1.3AC9 : Stand. Exchange cell H2 250	670021016	SX 3080OP13 : External tank 16 litres atm / casing 19'
670021044	SX 3080OP1.1AC1 : New H2 cell 100 cc		
670021046	SX 3080OP1.2AC1 : New H2 cell 160 cc		
670021048	SX 3080OP1.3AC1 : New H2 cell 250 cc	670021067	SX 3080OP97 : Voltage 230VAC /50Hz
670021005	SX 3080OP2 : additional dryer – 60°C DP	670021068	SX 3080OP98 : Voltage 230VAC /60Hz
670021050	SX 3080OP2AC1 consumables for dryer	670021069	SX 3080OP99 : Voltage 117VAC /60Hz

FLUIDIC SCHEME :



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