







RACK 4U

ZERO AIR GENERATOR

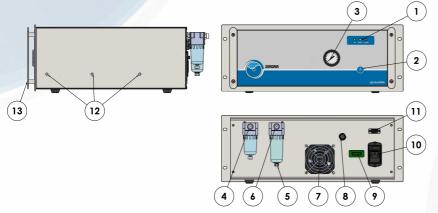
This series of Zero Air Generators are systems which replace the use of inconvenient high pressure gas cylinders as a source of hydrocarbon-free air.

Eliminate gas cylinders reduces annual operating costs of managing them and reduces the risk of possible injury to workers.

Zero Air Generator may be used as a source of fuel air for Flame Ionization Detectors (FID's) or as a zero reference for any instrument which measures hydrocarbon concentration.

The zero air generator will remove HC pollutants to less than 0.05 ppm.

This system is engineered to be easy to install and requires only minimal annual maintenance.



- 1 Status LEDs
- 2 START/STOP button
- 3 Outlet pressure gauge (optional)
- 4 Air outlet
- 5 Water drain purge
- 6 Compressed air inlet
- 7 Cooling fan air (inlet)
- 8 Pressure regulator
- 9 Potential free contact for remote alarm signal (optional) technical data: max 5A, 40VDC MAX / 25VAC MAX
- 10 Power switch and power socket
- 11 RS-485
- 12 Predisposition for sliding rails
- 13 Front handles

Main Applications

- THA
- GC-FID
- NPD
- FPD
- PFPD

Main Features

- Available Flow-rates:
 - 15000 or 30000 cc/min
- Outlet pressure:

6.5 bars

Total Hydrocarbon content:

< 0.05 ppm

Communication port:

RS-485

Dimensions:

Standard 19" Rack 4U – Deep 40 cm

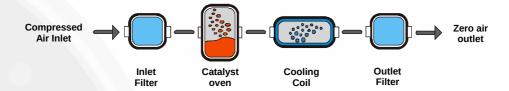
Weight:

<15 kg

Certification:

CE, ISO9001

Principle diagram



The system features 3 stages of filtration:

First Stage: high efficiency coalescing pre-filtration, removes liquids and particulate matter from the incoming air supply, down to 5 microns.

These filters are equipped with float drains which automatically open to empty any liquids from inside the filter housing. The drains are threaded ISO M5 which can be added a fitting and a tube which discharge into the atmosphere.

Second Stage: the catalytic module is a stainless steel vessel filled with catalyst and assembled with a cartridge heater controlled by temperature sensor, operating the catalyst bed at the required temperature for optimal oxidation. During operation, hydrocarbons are oxidized into carbon dioxide and water vapour.

Third Stage: a high-grade filter is used to remove 99.99% of particulates with size greater than 0.01 microns.

Technical specifications

Model	RACK.ZA.15000.V2	RACK.ZA.30000.V2
Air outlet	'	
Flow rate (max)	15.0 l/min	30.0 l/min
Outlet pressure (min)	Inlet pressure – 0.5 bars (8 psi) at maximum flow	
Outlet pressure (max)	6.5 bars (94 psi)	
Total hydrocarbon content	< 0.05ppm	
Start-up time	50 min	
Air inlet		
Max inlet hydrocarbon content	100ppm	
Min supply pressure	3 bars (43psi)	
Max supply pressure	10 bars (145 psi)	
Dew point	< -20°C	
Min temperature	1°C (34°F)	
Max temperature	35°C(95°F)	
Communication		
RS485	X	
General data		
Supply voltage	90-240Vac 50/60Hz	
Connection type	IEC320-C13	
Installation power (max)	240W	(280VA)
Fuse rating (5x20mm)		4A
Dimensions	Standard 19" Rack 4U – deep 40cm	
Net weight	< '	15 kg
Connections		
Outlet port	1/8'	female
Inlet port	1/8" female	
Water purge	ISO M5 female pipe thread	
Health connector	max 5A, 40VDC MAX / 24VAC MAX (normally closed)	
Operating conditions		
Temperature	5-35°C (41-95°F)	
Humidity (max, non condensing)	80% at 25°C (77°F)	
Noise	<25dB(A)	
IP rating	IP20	