



RACK 2U

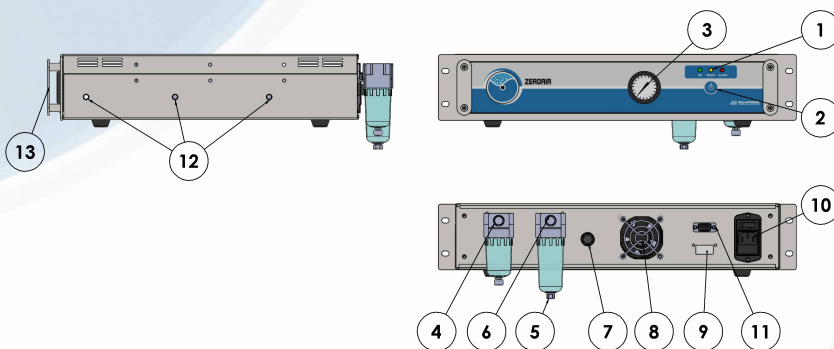
ZERO AIR GENERATOR

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
- 4 Air outlet
- 5 Water drain purge
- 6 Compressed air inlet
- 7 Pressure regulator
- 8 Cooling fan air (inlet)
- 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

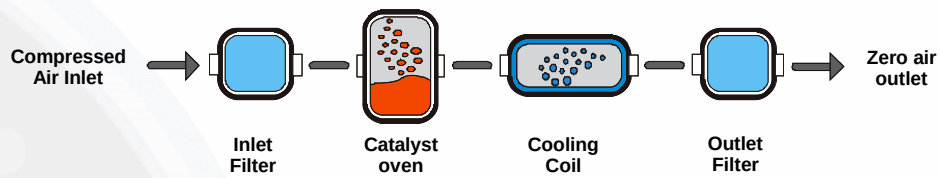
Main Applications

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

Main Features

- **Available Flow-rates:**
 up to 6000 cc/min
- **Outlet pressure:**
 6.5 bars
- **Total Hydrocarbon content:**
 < 0.05 ppm
- **Communication port:**
 RS-485
- **Dimensions:**
 Standard 19" Rack 2U –
 Deep 48 cm
- **Weight:**
 <13 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.1500.V2	RACK.ZA.3000.V2	RACK.ZA.6000.V2
Air outlet			
Flow rate (max)	1.5 l/min	3.0 l/min	6.0 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	40 min	45 min	45 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 2U – Deep 48 cm		
Net weight	< 13 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		