









ZERO AIR GENERATOR 50L

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

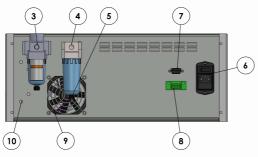
The elimination of gas cylinders reduces annual operating costs of managing them and reduces the risk of possible injury to workers.

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.





- START/STOP button
- Status LEDs
- ZeroAir outlet with pressure regulator
- Compressed air inlet
- 5 Water drain purge
- 6 Power switch and power socket
- 7 RS-485
- Potential free contact for remote alarm signal (optional) 8 Technical data: max 5A, 40VDC MAX / 25VAC MAX
- 9 Cooling fan air (inlet)
- 10 Predisposition for filter in wall mounting

Main Applications

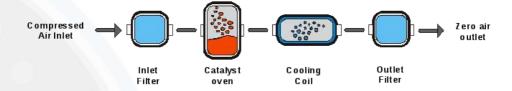
- THA
- GC-FID
- **NPD**
- **FPD**
- **PFPD**

Main Features

- **Available Flow-rates:**
 - 50000 cc/min
- **Outlet pressure:**
 - up to 9.5 bars
- **Total Hydrocarbon content:**
 - < 0.05 ppm
- Communication port:
 - RS-485
- **Dimensions:**
 - 65x45x18(H) 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	ZA.50000
Air outlet	
Flow rate (max)	50 l/min
Outlet pressure	Inlet pressure – 0.5 bars (7.25 psi) @ maximum flow
Total hydrocarbon content	< 0.05ppm
Start-up time	50min
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	100-240Vac 50/60Hz
Connection type	IEC320-C13
Installation power (max)	240W (280VA)
Fuse rating (5x20mm)	4A
Dimensions	65x45x18(H) cm
Net weight	<15kg
Connections	
Outlet port	1/8" female
Inlet port	1/8" female
Water purge	6mm(1/4) push fitting
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