

# Zero Air Generator for GC/TOC (Online/Offline)



Model : ZAG-02/03

- Zero Air Generator produces a continuous flow of high purity Zero Air at selected pressure
- For TOC Analyser, compressor takes the air from atmosphere, the hot air is then passed through copper cooling coil
- The cool air is then passed through furnace where hydrocarbons are cracked at high temperature (temp. range 300°C to 400°C) in presence of catalyst. The furnace reaction at higher temperature breaks the hydrocarbon into CO & H<sub>2</sub>O
- Water is drained away through 5μ & 0.01μ filter
- The modular pressure swing adsorption (PSA) unit operates with alternating pressure increase and decrease.
- Air flows under pressure through the reaction towers containing molecular sieve adsorber.
- Moisture, CO, CO<sub>2</sub>, THC and other unwanted components in the air are adsorbed, leaving Zero Air Gas.

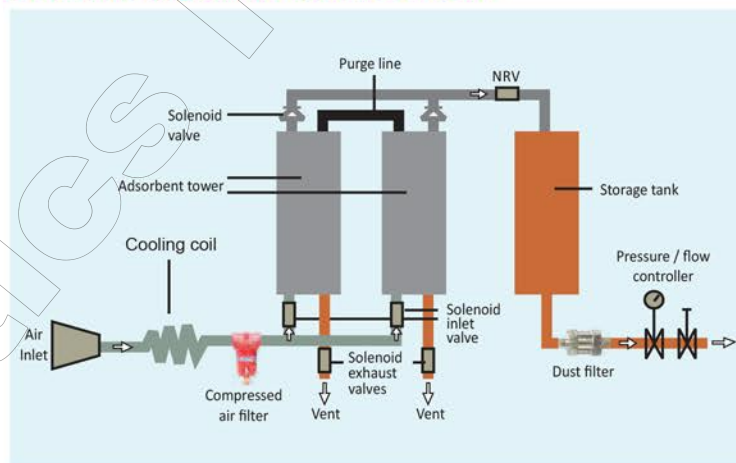
## Salient Features

- Micro controller digital display
- Deliver constant pressure & flow
- Fully Automatic System
- Easy Maintenance and space saving
- Effortless and easy operation
- Improves instrument performance
- Fully regenerative, durability with PSA technology

## Applications

- GC-FID, FPD, NPD, AED
- GC-MS, LC-MS-MS, ICP / NMR
- FTIR / IR, ELSD detector
- Purging, Ampule Filling
- Thermal instruments
- Analytical & Laboratory Instruments

## Schematic Diagram of Zero Air Generator



## Technical Specification for Zero Air Generator

PRINCIPLE SPECIFICATIONS	ZAG02 (for max. 5 GC's)	ZAG03 (for TOC Analyser)
Moisture	< 5 ppm	< 0.3 ppm
Total Hydro Carbon	< 0.3 ppm	< 0.5 ppm
CO & CO <sub>2</sub>	< 2 ppm	< 0.2 ppm
Purity	UHP grade	TOC/XL grade
Micro Particulates	< 0.01μ	< 0.01μ
Capacity of ZAG	upto 4 LPM at 80 Psi	500ml/min at 80 Psi
Method of purification	Pressure Swing Adsorption (PSA)	Pressure Swing Adsorption (PSA) & HC Cracking furnace
Room temperature	10 °C 25°C	5 °C 25°C
Start up time	5 minutes	30 minutes
Electrical requirements for ZAG	230 VAC, 50 Hz, 1 ph	230 VAC, 50 Hz, 1 ph, 5 Amp
Dimension (in mm)	400H x 600W x 600D	600H x 400W x 600D
Net weight	55 kg. (approx)	55 kg. (approx)
Gas Outlet Port	1/8" OD	1/8" OD