

TOC AIR GENERATOR SERIE TOC

F-DGS's TOC Air generators are some of the smallest and most efficient Hydrocarbon-free air and CO₂ purifier systems for laboratory use. Utilising a heated catalyst technology which is combine with a CO₂ removal air dryer to remove THC including methane to less than 0.05 ppm and CO₂ less than 1 ppm. This TOC air station is controlled using the latest in HMI touch screen technology to display the process in real time.



Application :

- GC-FID
- NPD
- FPD
- PFPD
- THA
- TOC
- Electronic noise

Benfits and Savings

■ Better detector performance

The reduction of CO and hydrocarbons, including methane to < 0.05 ppm decreases the background noise level and gives the baseline much better stability, considerably increasing detector sensitivity and ensuring precise analytical results. Reduce also CO₂ level to < 1ppm for TOC and Electronic noise applications

■ Increased laboratory efficiency

A constant, uninterrupted gas supply of guaranteed purity eliminates interruptions of analyses to change cylinders and reduces the amount of instrument re-calibrations required.

■ Save money

The unit only requires connection to a suitable socket for model with integrated compressor

The investment can be paid back in less than one year

■ Improved safety

TOC air produced at low pressure and ambient temperature removes the need for high pressure cylinders

■ Simple installation

Gas generators can be installed in the laboratory, on or under a bench, eliminating the need for long gas lines from cylinders secured elsewhere

Standard Features

- * **Flow rate : 1,5; 3 L/min**
- * **Integrated oil free air compressor**
- * **Auto start**
- * **Alarm display with help menu**
- * **Audible alarm sounder**
- * **Outlet flow indicator**
- * **Energy saving Mode**
- * **Compressor over temperature alarm**
- * **Remote access to screen using internet or GSM**
- * **Fit with wheels**

ENERGY SAVING MODE:

The generator has a real-time calendar and clock which can be easily updated no matter where you are in the World. By using the Auto-Run function you can select when the generator runs giving you complete control of your gas supply and saving energy.

Example: If your laboratory working hours is 8am to 6pm, set the generator to start at 5am to ensure you have high quality gas at 8am and have it switch off at 7pm, reducing running time and energy by some 55%.

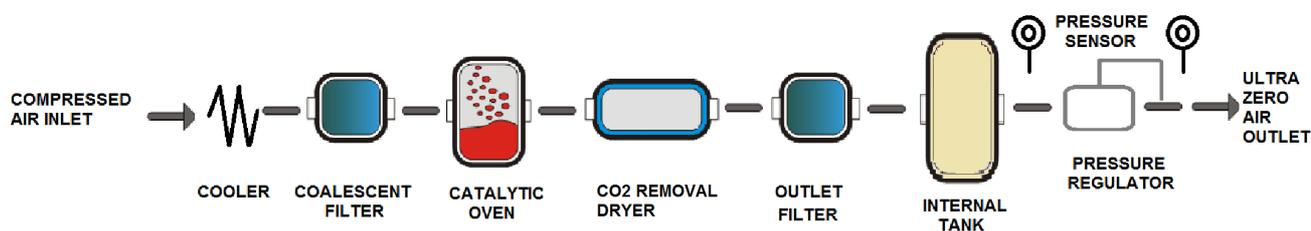
The TOC Air generator uses a palladium catalyst and a CO2 removal air dryer to produce TOC air gas.

The technology used to produce a continuous flow of TOC air is a combination of a catalyst which eliminate hydrocarbon molecule and a CO2-removal dryer which selectively eliminate CO2, moisture and other contaminants in the zero air.

The gas generator is designed to take pre-filtered compressed air at 8 barg from the existing laboratory supply or via the integrated oil-free compressor.

This flow of filtered compressed air then passes through a palladium catalyst, heated to very high temperature to insure hydrocarbon removal to less than 0.05ppm and then into the dryer which is in the purification mode. At this point, durst CO2 and humidity are removed from the compressed air stream, leaving a flow of clean, dry, high purity TOC gas.

This unit is equipped with an outlet filter to remove 99.99% of particulates greater than 0.5 microns in size, an internal tank which allows the unit to have a small capacity to avoid fluctuation due to the system and a pressure regulator to permit the compressor stops once the tank has reached its higher pressure level and starts again, once the tank has reached its lower pressure level.



Technical Specifications

Model	TOC1-1	TOC1-0	TOC3-1	TOC3-0
Zero air flowrate (L/min) at 5 barg	1.5	1.5	3	3
Total HC out	< 0.05 ppm		< 0.05 ppm	
Total CO out	< 0.05 ppm		< 0.05 ppm	
Total CO2 out	< 1 ppm		< 1 ppm	
Water dewpoint	- 70°C		- 70°C	
Integrated oil free air compressor	YES	NO	YES	NO
Sound level	< 50 dBA		< 50 dBA	
Max power*	700W	300W	700W	300W
Weight (Kg)	60	55	60	55
Dimensions (H x L x P) cm	60x 32 x 70		60x 32 x 70	

Note : Unit is mounted on wheels

* power is the maximum when heater and compressor are both on at full power, it will not be as high as those values when the compressor is off and when the heater is not at 100%, so give maximum power rating above

Technical Data

Ambient Temp range	5-35°C (41-95°F)
Air Inlet Pressure	Up to 8 barg
Outlet Pressure	Up to 6 barg
Electrical Supply	220v a.c. / 1ph / 50Hz or
	110v a.c. / 1ph / 50-60Hz
Inlet / Outlet connections	G 1/4" (BSP) Female