

ULTRA ZERO AIR GENERATOR SERIE ZAG

F-DGS's Ultra Zero Air Generators are some of the most efficient Hydrocarbon-free air purifier systems for laboratory use. Utilising the PSA technology to remove water vapour and the heated catalyst technology to remove THC including methane to less than 0.05 ppm. This Ultra Zero Air station DO NOT requires external compressed air supply. The Generator is controlled using the latest in HMI touch screen technology to display the process in real time.





Applications:

- •GC-FID
- NPD
- •FPD
- •PFPD
- •THA

Benefits and Savings

Better detector performance

The reduction of 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.

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 The investment can be paid back in less than one year

Improved safety

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

Security of supply

DO NOT requires external compressed air supply

Simple installation

Gas generators can be installed in the laboratory eliminating the need for long gas lines from cylinders secured elsewhere

Standard Features

- Various flow rate: 1, 3, 6, 10, 20, 35, 50 L/min
- Available with or without integrated compressor
- Auto start button
- Alarm display with help menu
- * Audible alarm sounder
- Outlet flow indicator
- * Energy saving Mode
- * Compressor over temperature alarm
- Remote acess to screen using internet or GSM

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%.



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The Ultra Zero Air generator uses pressure swing adsorption technology (PSA) and a palladium catalyst to produce ultra zero air gas.

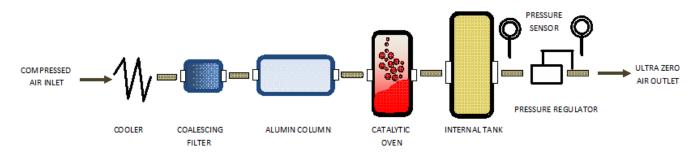
The gas generator is designed to take compressed air at 8 barg from an integral oil free air compressor, which is firstly pre filtered. This filtered compressed air stream is then passed to the alumina bed currently in purification mode. This first stage of air filtration permit to remove particles, moisture and some hydrocarbons from the compressed air, resulting in a product stream of clean, dry, high purity pure air gas.

And then Pure Air is next channelled into a stainless steel catalyst chamber where any Background hydrocarbons or carbon monoxide are oxidized. This palladium catalyst, heated to very high temperature to insure hydrocarbon removal to less than 0.05 ppm.

The compressed Ultra Zero air is next stored in an internal tank.

Then the air is regulated in pressure and ready to use.

The compressor stops once the air reservoir has reached its maximum pressure level and starts again, once the air reservoir has reached its minimum pressure level.



Technical Specifications

Technical Data

Models		Flow rate I/min	Purity	Outlet Pressure Bar g	Inlet Air pressure required Bar g	Inlet Air Flow rate required I/min	Size
ZAG1	0	1.0		5.5	7	2.25	Size 2
ZAGI	1	1.0		5.5	-	-	Size 2
ZAG3	0	3.0	CH4, CO, NOx out < 0.05 ppm CO2 level out < 5 ppm Water dewpoint - 50°C Particle filtration level 0.1 micron	5.5	7	6.75	Size 2
	1	3.0		5.5	-	-	Size 2
ZAG6	0	6.0		5.5	7	13.50	Size 2
	1	6.0		5.5	-	-	Size 2
ZAG10	0	10.0		5.5	7	22.50	Size 3
	1	10.0		5.5	-	-	Size 3
ZAG20	0	20.0		5.5	7	45.00	Size 3
ZAG20	1	20.0		5.5	-	-	Size 3
ZAG35	0	35.0		5.5	7	78.75	Size 3
	1	35.0		5.5	-	-	Size 3
ZAG50	0	50.0		5.5	7	112.50	Size 3
	1	50.0		5.5	=	-	Size 3

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240 V / 50 HZ

110 V / 60 HZ

Air Inlet Pressure	Up to 8 barg		
Outlet Pressure	Up to 6 barg		
Air Inlet Requirement (units without compres-	Dewpoint: -40°C (-40°F)		
sor)	Particulate: <1 micron		
	Ambient Temp range		
Ambient Temp range	5-35°C (41-95°F)		
Electrical Supply	220v a.c. / 1ph / 50Hz or		
	110v a.c. / 1ph / 50-60Hz		
Inlet / Outlet connections	G 1/4" (BSP) Female		

Dimensions and Weights

Enclosure Size	Height mm	Width mm	Depth mm	Weight Kg (*)
Size 2	650	320	650	45
Size 3	725	450	665	80

