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APPLICATIONS : GC-FID, FPD, NPD / THA / GAS SENSING

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-calibration required.

> Improved safety

Zero 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.

ZERO AIR WITHOUT INTEGRATED COMPRESSOR: produces dry and hydrocarbon-free air < 0.05 ppm, using a heated catalytic technology and connecting it to a dry compressed air supply. Allows to be used individually or coupled to any one of the F-DGSI H2 generator to form an all-in-one FID gas station solution.

The unit can be combined with any Alliance H2 generators



FEATURES

HIGH PERFORMANCE CATALYST

> Compact, modular design.

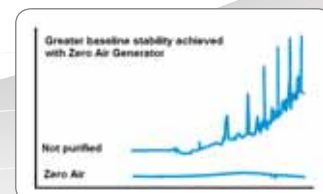
For easy mounting of a F-DGSI Hydrogen generator.

> Quick and easy servicing.

Changing the filters once a year takes a few minutes.

> Purity < 0.05 ppm (CH4).

> Facility for integration with a dedicated air compressor.



PRINCIPLE OF OPERATION

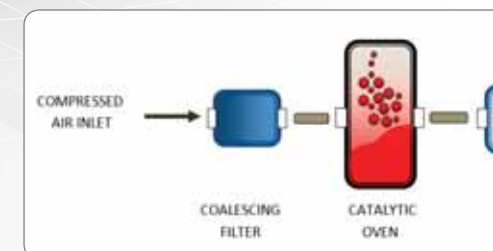
Zero Air generators use three steps to transform ambient air into analytical grade air.

> STEP 1: PRE-FILTRATION

The external oil-free compressor delivers air through a high efficiency filter that traps any particles that may damage the system. The filter has an automatic purge system, and traps oil, water and any other particles larger than 5 microns in size.

> STEP 2: HC AND CO TRAPPING

The air leaving the filter enters a high-temperature platinum catalyst, which through oxidation eliminates hydrocarbon molecules down to < 0.05 ppm.



MODEL	Flow rate (Max)	Outlet pressure (Max)	Total Hcs content	Start up time	Max inlet hydrocarbon content	Water dewpoint required at the air inlet	Inlet air Supply Pressure	Dimensions W x H x D cm	Net weight Kg	Installation Power (Max)
ZA-1500	1.5	6.5 bar	< 0.05 ppm	40 min	100 ppm	< 20 °C	3 – 10 bar	43 x 34 x 20	8	240 W 280 VA
ZA-3000	3.0								8	
ZA-6000	6.0								9	
ZA-15000	15.0								18	
ZA-30000	30.0								20	

RACKABLE ZERO AIR GENERATORS

SERIE RACK-ZA



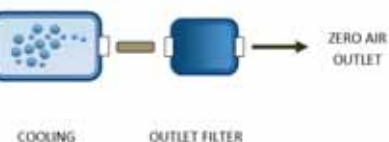
ZERO AIR

> STEP 3: FINAL FILTRATION

A high-efficiency filter is used to prevent any kind of particles from entering the instrument.

> EXTERNAL COMPRESSOR (OPTION)

Following an agreement with a leading manufacturer operating a sales and service network in many cities throughout the world, we can supply the right "oil free" compressor for different flow requirements.



MODELS	RACK-ZA-1500	RACK-ZA-3000	RACK-ZA-6000	RACK-ZA-15000	RACK-ZA-30000
Flow rate (max)	1,5 l/min	3,0 l/min	6,0 l/min	15,0 l/min	30,0 l/min
OUTLET pressure (max)	6.5 Bar (94 psi)				
Total outlet hydrocarbon content	< 0.05 ppm				
Startup time	40 min				
Max inlet hydrocarbon content	100 ppm				
Water dewpoint	< - 20°C				
Inlet air Supply Pressure	3 Bar (43psi) - 10 Bar (145 psi)				
Dimensions	Standard 19" Rack 4U – deep 40 cm				
Net weight	8Kg	9Kg	18Kg	20Kg	
Supply voltage	90-240 VAC, 50/60 Hz				
Installation Power (max)	240 W, 280 VA				
Inlet/outlet Connections	1/8" Female				

THE RACK-ZERO AIR GENERATORS

Produce dry and hydrocarbon-free air, using air from oil-free compressors, thus avoiding the need to use traditional bottles that are often complex to change. Designed with safety and convenience in mind, this system will eliminating the need for inconvenient high pressure gas cylinders.

ULTRA ZERO AIR / TOC AIR

FEATURES

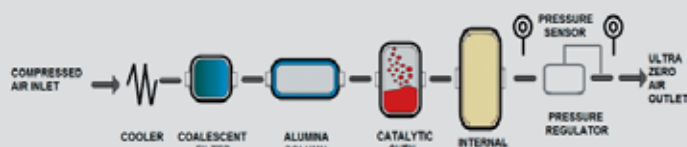
- > Available with or without built-in-air compressor.
- > Quiet thanks to the Soundproofed compressor box and anti-vibration features.
- > Auto start.
- > Audible and alarm display with help menu.
- > Visual maintenance indication.
- > Outlet flow indicator.
- > **Energy saving Mode:** Enables the compressor to switch off when nitrogen supply is not required.
- > Trend graph QA reporting.
- > Remote access to screen using internet or GSM.
- > Fit with wheels.



APPLICATIONS serie UZAG : GC-FID, FPD, NPD / THA - APPLICATIONS serie TOC : ELECTRONIC NOISE / TOC

MODELS		Flow rate l/min	Purity	Outlet Pressure Bar g	Inlet Air pressure required Bar g	Inlet Air Flow rate required l/min	Dimensions W x H x D cm	Weight Kg	
UZAG1	0	1.0	CH ₄ , CO, NO _x out < 0.05 ppm CO ₂ level out < 5 ppm Water dewpoint - 50°C Particle filtration level 0.1 micron	5.5	7	2.25	34 x 71 x 69	45	ZERO AIR GENERATOR
	1	1.0		5.5	-	-	34 x 71 x 69	60	
UZAG3	0	3.0		5.5	7	6.75	34 x 71 x 69	45	
	1	3.0		5.5	-	-	34 x 71 x 69	60	
UZAG6	0	6.0		5.5	7	13.50	34 x 71 x 69	45	
	1	6.0		5.5	-	-	34 x 71 x 69	60	
UZAG10	0	10.0		5.5	7	22.50	43 x 78 x 77	80	
	1	10.0		5.5	-	-	43 x 78 x 77	96	
UZAG20	0	20.0		5.5	7	45.00	43 x 78 x 77	80	
	1	20.0		5.5	-	-	43 x 78 x 77	96	
UZAG35	0	35.0		5.5	7	78.75	43 x 78 x 77	80	
	1	35.0		5.5	-	-	43 x 78 x 77	96	
UZAG50	0	50.0		5.5	7	112.50	43 x 78 x 77	80	
	1	50.0		5.5	-	-	43 x 78 x 77	96	

ULTRA ZERO AIR BUILT IN AIR COMPRESSOR: it uses the combination of high level filtration through a dryer and catalytic technology to produce a clean and dry air with hydrocarbons including methane down to 0.05 ppm, H₂O dewpoint < -50°C.



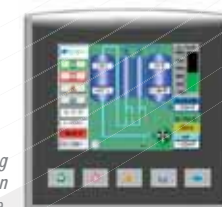
TOC AIR GENERATORS: are some of the most efficient hydrocarbon Free air and CO₂ purifier systems. Utilising a heated catalyst technology which is combined with a CO₂ removal air dryer to remove THC including CH₄ < 0.05 ppm, CO₂ < 1 ppm and H₂O dewpoint < -70°C.



TOC1	0	1.5	CH ₄ , CO, NO _x out < 0.05 ppm CO ₂ level out < 1 ppm Water dewpoint - 70°C	5.5	7	16.5	34 x 71 x 69	45	TOC AIR GENERATOR
	1	1.5	Particle filtration level 0.1 micron	5.5	-	-	34 x 71 x 69	60	

0	Without compressor	E	240 V / 50 HZ
1	With compressor	W	110 V / 60 HZ
MODEL	0	E	Selected product code

The generator is controlled using the latest in HMI touch screen to display the process in real time.



FT-IR PURGE GAS GENERATOR

SERIE FT-IR



APPLICATIONS : FT-IR

BENEFITS AND SAVINGS

> Better detector performance

The TOC AIR generator reduces CO₂ level < 1 ppm for TOC application and Electronic Noise. The FT-IR Purge Gas generator generates cleaner background spectra in a shorter period of time and more accurate analysis by improving the signal-to-noise ratio.

> 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.

> Improved safety

TOC AIR or FT-IR purge gas 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.



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FT-IR PURGE GAS GENERATOR BUILT IN AIR COMPRESSOR: It is specifically designed for use with FT-IR spectrometers to provide a purified purge and air bearing gas supply from compressed air.

The unit provides instruments with CO₂ free compressed air at less than -70°C dew point with no suspended impurities larger than 0.01 micron 24 hours/day, 7 days/week.

FEATURES

- > Built-in-air compressor.
- > Quiet thanks to the Soundproofed compressor box and anti-vibration features.
- > Auto start.
- > Audible and alarm display with help menu.
- > Visual maintenance indication.
- > Outlet flow indicator.
- > Energy saving Mode: Enables the compressor to switch off when Air Purge Gas supply is not required.
- > Fit with wheels.
- > Increases FT-IR sample thru-put and maximizes up-time.
- > Improves signal-to-noise ratio even on non-purge systems.

MODEL	Flow rate (Max)	Outlet pressure (Max)	CO ₂ concentration	H ₂ O Dew point	Min/Max. Ambient temperature	Built with in Air Compressor	Dimensions W x H x D cm	Net weight Kg
FT-IR 30/1	30 L/min	80 Psig	< 1 ppm	-70°C	5°C -35°C	yes	43 x 78 x 77	100