



ZERO AIR GENERATORS

Zero Air Generator

550W x 410H x 230D (21.6W x 16H x 9D)



GC ZERO AIR GENERATOR

The GC Zero Air Generators produces 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.

The ergonomic, compact and silent design makes the GC series generators the ideal solution for the following analytical applications: GC-FID, GC-NPD, GC-FPD, GC-PFPD, THA, TOC.

GC ZERO AIR GENERATOR

SPECIFICATIONS

- Models available
 - GC-1500 1.5 l / min
 - GC-3000 3 l / min
 - GC-6000 6 l / min
 - GC-15000 15 l / min
 - GC-30000 30 l / min
- External compressor (option): Following an agreement with a leading manufacturer operating a sales and service network in many cities throughout Italy and the world, VICI DBS can supply the right "oil free" compressor for different flow requirements.

OPERATING DIAGRAM

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

STEP 1: PRE-FILTRATION

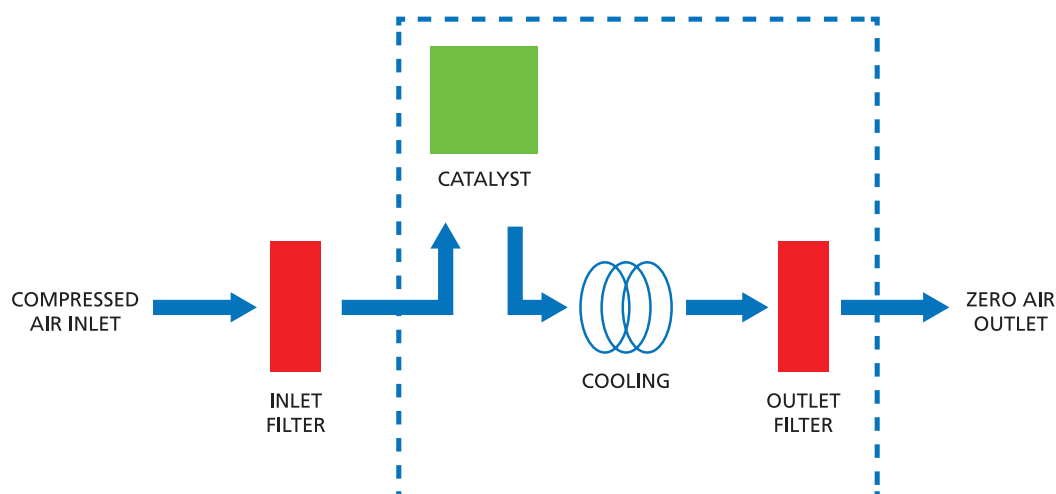
The external oil-free compressor delivers air through a high efficiency filter that traps any particles that may damage the system. The filter has an automatic purge system, and traps oil, water and any other particles larger than 5 microns in size.

STEP 2: HC AND CO TRAPPING

The air leaving the filter enters a high-temperature platinum catalyser, which through oxidation eliminates hydrocarbon molecules down to < 0.1 ppm.

STEP 3: FINAL FILTRATION

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



GC ZERO AIR GENERATOR

BENEFITS

BETTER DETECTOR PERFORMANCE

The reduction of hydrocarbons, including methane, and carbon monoxide to < 0.1 ppm decreases the background noise level and gives the baseline much better stability, considerably increasing detector sensitivity and ensuring precise analytical results.

EASY INSTALLATION

Just connect a suitable oil free compressor (optional) to almost immediately have air at the right grade. To save bench space, the unit can be easily installed on the lab wall.

LAB SAFETY

No more bottles in the lab and expensive pipelines for air distribution.

SAVE MONEY

The unit only requires connection to a suitable oil free compressor and the mains: the investment can be paid back in less than a year.

IMPROVED LAB EFFICIENCY

Continuous operation 24 hours a day cuts dead times for gas bottle changeover and avoids the need for tedious instrument recalibrations.

MODELS	GC1500	GC3000	GC6000	GC15000	GC30000
Flow (l / min).	1.5	3	6	15	30
HC & CO out	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Max CO in	50 ppm	50 ppm	50 ppm	50 ppm	50 ppm
Max HC in	100 ppm	100 ppm	100 ppm	100 ppm	100 ppm
Max temp. in	40°C	40°C	40°C	40°C	40°C
Pressure in (*)	4.5-10 bar	4.5-10 bar	4.5-10 bar	4.5-10 bar	4.5-10 bar
Pressure drop	< 1 bar	< 1 bar	< 1 bar	< 1 bar	< 1 bar
Stability (min)	45	45	45	45	45
In / out connections	1 / 4-1 / 8 (NPT)	1 / 4-1 / 8 (NPT)	1 / 4-1 / 8 (NPT)	1 / 4-1 / 8 (NPT)	1 / 4-1 / 8 (NPT)
Weight (kg)	5	9	12	22	22
Power	110-120V 60Hz / 220-240V 50Hz				
Dimensions (mm)	410H x 550W x 230D				
Working temp	Amb.+15°C				
Certification	CE, CSA, FCC				

Ultra Zero Air Generator

550W x 410H x 230D (21.6W x 16H x 9D)



GT ULTRA-ZERO AIR GENERATOR

The GT Ultra-Zero Air generators produce dry and hydrocarbon / NO_x-free air, using air from oil free compressors, thus avoiding the need to use traditional bottles that are often complex to change.

The ergonomic, compact and silent design makes the Ultra-Zero Air series generators the ideal solution for the following analytical applications: GC-FID, GC-NPD, GC-FPD, GC-PFPD, THA, TOC.

GT ULTRA-ZERO AIR GENERATOR

SPECIFICATIONS

- Models Available:
 - GT-1500 1.5 l / min
 - GT-3000 3 l / min
 - GT-6000 6 l / min
 - GT-15000 15 l / min
 - GT-30000 30 l / min
- External Compressor (option): Following an agreement with a leading manufacturer operating a sales and service network in many cities throughout Italy and the world, VICI DBS can suggest the right “oil free” compressor for different flow requirements.

OPERATING DIAGRAM

Ultra-Zero Air generators use five 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: DRYING AND TRAPPING

Residual moisture and CO₂ / CO molecules are removed by a dual active carbon trap.

STEP 3: NO_x, SO_x, O₃

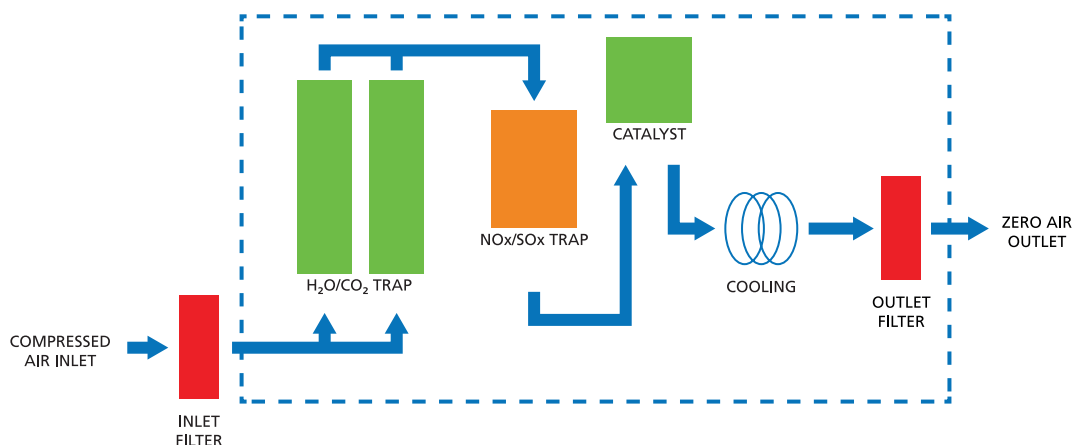
A special scrubber removes specific molecules.

STEP 4: HC AND CO TRAPPING

The air leaving the filter enters a high-temperature platinum catalyzer, which through oxidation eliminates hydrocarbon molecules down to < 0.1 ppm.

STEP 5: FINAL FILTRATION

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



GT ULTRA-ZERO AIR GENERATOR

BENEFITS

BETTER DETECTOR PERFORMANCE

The reduction of hydrocarbons, including methane, and carbon monoxide to < 0.1 ppm, as well as NO_x to < 1 ppm, decreases the background noise level and gives the baseline much better stability, considerably increasing detector sensitivity and ensuring precise analytical results.

EASY INSTALLATION

Just connect a suitable oil free compressor (optional) to almost immediately have air at the right grade. To save bench space, the unit can be easily installed on the lab wall.

LAB SAFETY

No more bottles in the lab and expensive pipelines for air distribution.

SAVE MONEY

The unit only requires connection to a suitable oil free compressor and the mains: the investment can be paid back in less than a year.

IMPROVED LAB EFFICIENCY

Continuous operation 24 hours a day cuts dead times for gas bottle changeover and avoids the need for tedious instrument recalibrations.

MODELS	GT1500	GT3000	GT6000	GT15000	GT30000
Flow (l / min).	1.5	3	6	15	30
HC & CO out	< 0.1 ppm	< 0.1 ppm	< 0.1 ppm	< 0.1 ppm	< 0.1 ppm
CO ₂ out	< 5 ppm	< 5 ppm	< 5 ppm	< 5 ppm	< 5 ppm
NOx, SOx out	< 0.1 ppm	< 0.1 ppm	< 0.1 ppm	< 0.1 ppm	< 0.1 ppm
Max CO in	50 ppm	50 ppm	50 ppm	50 ppm	50 ppm
Max HC in	100 ppm	100 ppm	100 ppm	100 ppm	100 ppm
Max temp. in	40°C	40°C	40°C	40°C	40°C
Pressure in (*)	4.5-10 bar	4.5-10 bar	4.5-10 bar	4.5-10 bar	4.5-10 bar
Pressure drop	< 1 bar	< 1 bar	< 1 bar	< 1 bar	< 1 bar
Stability (min)	45	45	45	45	45
In / out connections	1 / 4-1 / 8 (NPT)	1 / 4-1 / 8 (NPT)	1 / 4-1 / 8 (NPT)	1 / 4-1 / 8 (NPT)	1 / 4-1 / 8 (NPT)
Weight (kg)	9	9	25	25	25
Dimensions (mm)	410H x 550W x 250D			470H x 630W x 310D	
Power	110-120V 60Hz / 220-240V 50Hz				
Working temp	Amb.+15°C				
Certification	CE, CSA, FCC				