

Zero Air Generator

AIR QUALITY MONITORING SYSTEMS

The ZAG 7001 Zero Air Generator is a pure air generator system, capable of continuous delivery of up to 20 standard liters per minute (SLPM), 30 pounds per square inch (PSI) of dry, contaminant-free air.



SPECIFIC FEATURES:

- Internal compressor with pressure control
 - Internal PSA dryer
 - Long-lasting filtering cartridges
 - Automatic condensates removal
 - Option: CO & HC internal heated catalytic scrubber
- Purity :
- CO < 25 ppb
 - NO₂, SO₂, O₃, H₂S < 0,5 ppb
 - HC (including CH₄) < 20 ppb
- Zero air generation for ambient air gas analyzers
 - Compact and silencious device
 - The ZAG7001 is a powerful stand-alone unit, so there is no need for you to worry about an external compressed air supply.



ZAG7001 - internal view

MAIN APPLICATIONS:

- > Check calibration of the zero for ambient air gas analyzers
- > Supply of diluent air for most of calibration systems, including the MGC101 model
- > Supply of zero air for dilution-based sampling systems

Zero Air Generator **ZAG 7001**

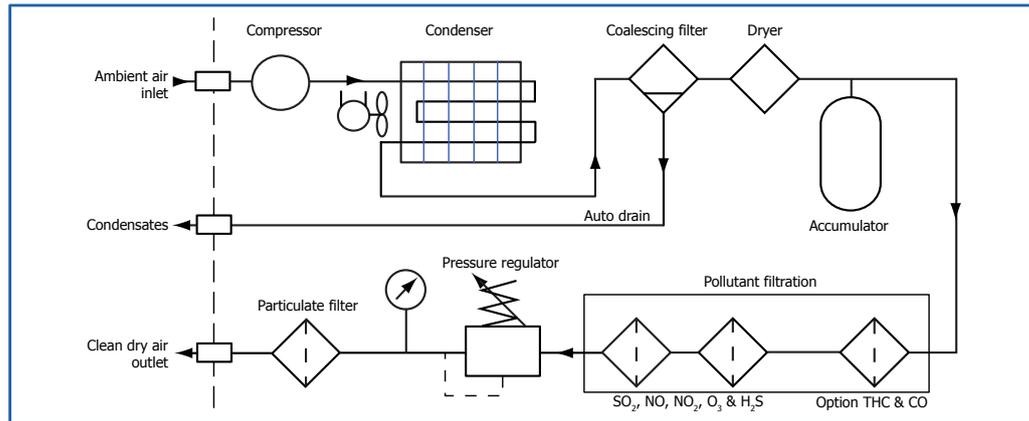
PRINCIPLE OF OPERATION:

The ZAG 7001 Zero Air Generator is a pure air generator system that is capable of continuous delivery of up to 20 standard liters per minute (SLPM), 30 pounds per square inch (PSI) of dry, contaminant-free air.

The air is suitable for use as: a zero reference calibration gas, ultra-pure combustion air for flame ionization detector, and service air for pneumatically operated valves.

The system is capable of delivering air free from water vapor, particles, sulfur dioxide (SO₂), Hydrogen Sulfide (H₂S), Oxides of Nitrogen (NO), Nitrogen Dioxide (NO₂), Ozone (O₃), Carbon Monoxide (CO) and Hydrocarbons (HC).

The state-of-the-art PSA molecular sieve removes water and produces air with a dew point of less than -30°C. An 80 seconds drain interval negates the potential of excess water build-up.



OPTION:

- CO and THC catalytic converter

Model ZAG7001 consists of oil-less piston pump and scrubbers to remove SO₂, NO, NO₂, O₃ and H₂S. Optional scrubbers are available to remove CO and Hydrocarbons. A ballast tank is standard in the system. It extends both the pump and scrubber life by cycling the pump automatically only as needed.

Model ZAG7001 offers automatic pneumatic control. It will automatically turn on and off based on the demand of the system that it is supporting.

Operation of the system has been simplified so that the operator can set the output pressure desired through a regulator on the front panel of the system. The output pressure gauge is located to accurately reflect the output pressure of the system.

The Zero Air Generator is designed to fit into a 19" rack with optional slides or used in a portable mode. Strict attention has been paid to the weight of all components to make this system as light as possible.

TECHNICAL SPECIFICATIONS

Flow rate	1-20 NI/min at 2.07 bars (30 psig)
Dew point	< -30°C up to 10 SLPM (Standard l/min) < -10°C up to 20 SLPM (Standard l/min)
Dryer	Pressure Swing Adsorption dryer (PSA)
Pump	Internal Ion-life, oil-less piston pump
HC scrubber temperature	Ajustable from 300°C up to 480°C for improved THC removal
Dimensions	482 x 597 x 222 mm (W x D x H) 19 x 23.5 x 8.75 inches (W x D x H)
Weight	20.4 kg / 45 lbs
Power supply	100 to 250 VAC, 50-60Hz
Consumption	<500 Watts
Standard operating temperature	+5°C to +45°C
Performance temperature range	+15°C to +30°C
Residual pollutant concentrations	<ul style="list-style-type: none"> • NO, NO₂, NO_x, SO₂, O₃, H₂S: <0.5 ppb • CO: < 25 ppb (with optional scrubber) • Hydrocarbons: < 20 ppb (with optional scrubber)

