



# AQMS-100 Zero Air Generator

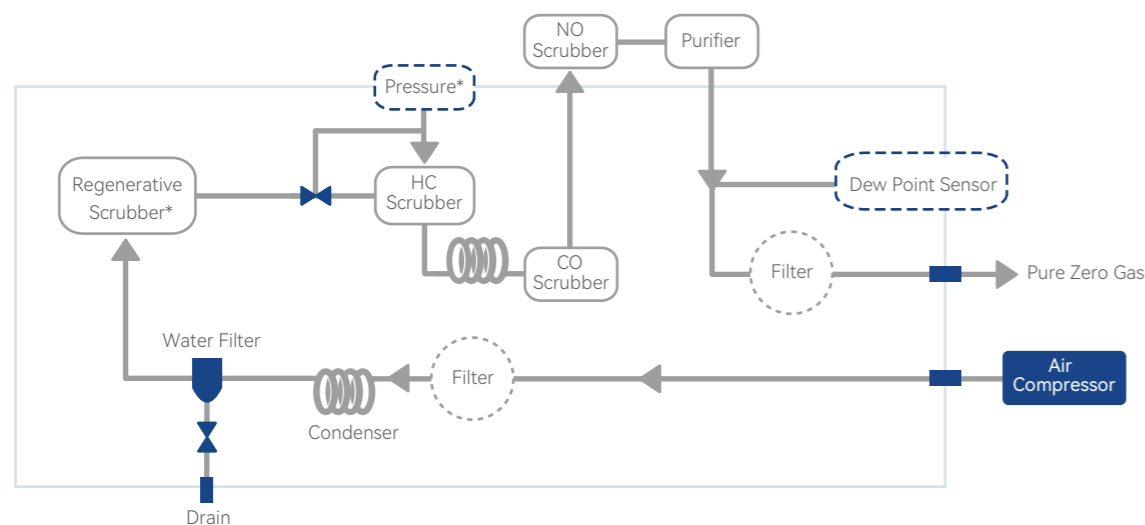


**FPI AQMS-100 provides ultra pure pollutant-free zero air for calibrating zero point of ambient air quality monitor. It consists of air compressing and cooling system, water removal system, gaseous pollutant scrubber system, particle removal and zero gas output system.**



## Principle

The AQMS-100 generates clean and dry zero air by removing components which will cause interference on zero point calibration.



\*Molecular sieve are utilized in regenerative scrubber

\*Activated carbon are utilized in purifier

## Water Removal System

The primary draining system apply condenser to remove the saturated liquid water in ambient air. The secondary draining systems are used to remove gaseous water in the ambient air by utilizing the regeneration scrubber. It is filled with two molecular sieves which have multiple holes and filters. One molecular sieve will work to remove the water in raw air while another is under regeneration by injecting compressed air to remove moisture.

## HC/CO/NO Scrubber

To remove hydrocarbon, CO and NO, three scrubbers applying catalytic reaction are used, where HC and CO will be converted into CO<sub>2</sub> which does not interfere analyses and NO will be converted into NO<sub>2</sub>. Then activated carbon applied to remove CO<sub>2</sub>, NO<sub>2</sub>, O<sub>3</sub>, SO<sub>2</sub>, H<sub>2</sub>S and NH<sub>3</sub>.

## Features

- 01. Ultra high purity zero air output
- 02. Regenerative dryer utilizing molecular sieve to perform maintenance free advantage
- 03. Remote display and configuration on key functions
- 04. Integrated dew point sensor
- 05. High performance scrubbers to remove hydrocarbon, CO, SO<sub>2</sub>, NH<sub>3</sub>, NO, NO<sub>2</sub>, ozone and BTX

## Specifications

|                       |  |
|-----------------------|--|
| Output                | 20 SLPM at 30 psig   |
| Dew Point             | ≤-20°C(≤10SLPM); ≤-10°C(≤20SLPM)   |
| Output Concentration  | SO <sub>2</sub> ≤0.5ppb; NOX≤0.5ppb; O <sub>3</sub> ≤0.5ppb;<br>CO≤0.025ppm; CH <sub>4</sub> ≤5ppb; NMHC≤0.25ppb |
| Power Requirement     | 220V AC, 50Hz, ≤600W   |
| Operating Temperature | (0~40)°C; (0~95)%RH  |
| Dimension             | 562×482×222mm; ≤20kg   |