# AQMS-100 Zero Air Generator

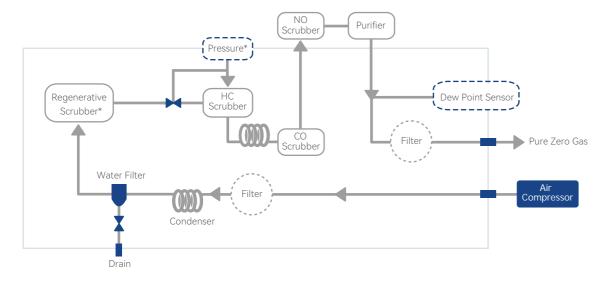


FPI AQMS-100 provides ultra pure pollutant-free zero air for calibrating zero point of ambient air quality monitor. It consists of air compressing and cooling system, water removal system, gaseous pollutant scrubber system, particle removal and zero gas output system.



### **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

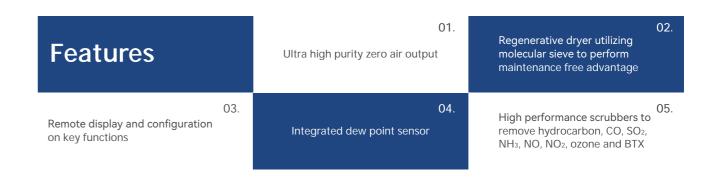
#### **Water Removal System**

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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>.



## **Specifications**

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Output	20 SLPM at 30 psig
Dew Point	≤-20°C(≤10SLPM); ≤-10°C(≤20SLPM)
Output Concentration	SO₂≤0.5ppb; NOX≤0.5ppb; O₃≤0.5ppb;
	CO≤0.025ppm; CH₄≤5ppb; NMHC≤0.25ppb
Power Requirement	220V AC, 50Hz, ≤600W
Operating Temperature	(0~40)°C; (0~95)%RH
Dimension	562×482×222mm; ≤20kg