



AQMS-600 Nitrogen Oxides Analyzer

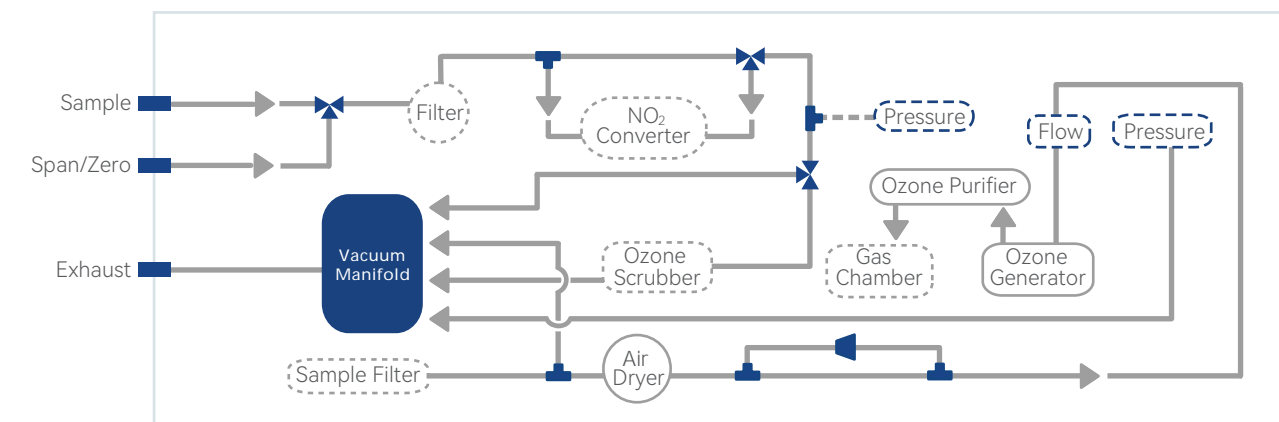


FPI AQMS-600 nitrogen oxides (NO-NO₂-NO_x) analyzer utilizes chemiluminescence technology indicated by US EPA as federal reference method for monitoring on multiple forms of nitrogen oxides.



Principle

Nitrogen oxides in ambient are measured indirectly by photometrically measures the light intensity, resulting from the chemiluminescent reaction of nitric oxide (NO) with ozone (O₃). NO₂ is first quantitatively reduced to NO by means of a converter. NO, which commonly exists in ambient air together with NO₂, passes through the converter unchanged causing a resultant total NO_x concentration equal to NO+NO₂.



PMT System

The characteristic fluorescence of unstable excited-state NO₂ is received by the photomultiplier tube and converted into an electrical signal. The number of electrons is increased by the photomultiplier system and the current or voltage is collected by the anode.

Ozone Generation

Permeation dryer are introduced in ozone generation to provide long system durability without any replacement. A catalytic ozone scrubber is installed for maximize pump life and exhaustion safety purpose.

Features	01. Permeation dryer on ozone generator	02. Catalytic ozone scrubber	03. Independent ranges for NO, NO ₂ and NO _x	04. Compliance with US EPA reference method	05. Various outputs include RS232, RS485, Ethernet
	06. User-friendly interface with large screen	07. Continuous system diagnosis with alarm	08. Multi-tasking software allows viewing test variables while operating	09. Temperature and pressure compensation	10. Internal data logging with 1 min to 365 days multiple averages

Specifications

Principle	Chemiluminescence
Standard Range	Max:0~20ppm Min:0~100ppb(Selectable)
Zero Noise	≤0.2ppb(RMS)
Span Noise	≤2.5ppb(RMS)
Display	Digital
Lower Detectable Limit	≤0.4ppb(RMS)
Zero Drift	±1ppb/24h
Span Drift	±5ppb/24h
Linearity	<1%F.S.
Precision	<1%
Response Time	T90<60s
Sample Flow Rate	(500±50)sccm
Data Transmission	2 channel analog(4~20) mA; 12 digital input/output; 4-way relay output;
Calibration	Multi-point calibrator
Output	RS232/RS485/Ethernet
Operating Temperature	US EPA Specification 20~30°C Actual applicable: 5~40°C
Operating Humidity	0~95%RH(No condensation)
Power Requirement	220±10%V AC/50±1%Hz; 110V/60Hz
Dimensions and Weight	178(H)x432(W)x604(D)mm, 22kg