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AQMS-300 Ozone Analyzer



FPI AQMS-300 Ozone analyzer measures ambient O₃ concentration in ppb level by utilizing UV photometric absorption technology.

Principle

The instrument measures the concentration of ambient ozone on the basic principle of ozone adsorbing UV light in chamber with 42cm optical length for light adsorption since there is a significant characteristic absorption for ozone on wavelength of 254nm.Periodical diversion on sample flow passing through the ozone scrubber will generate reference measurement, which is compared with sample measurement to provide stable and representative result.

Features

- Accurate direct UV absorption with reference comparison;
- Various outputs include ethernet and RS232;
- Multi-tasking software allows viewing test variables while operating;
- Internal data logging with 1min to 365 day multiple averages;

Ozone Scrubber

The ozone scrubber is filled with MnO₂ as catalyst, which will convert O₃ to O₂ to perform preference measurement Meanwhile, the presence of other components remains the same.



- · Compliance with US EPA equivalent method;
- User friendly interface with large screen;
- Continuous system diagnosis with alarm;
- · Temperature and pressure compensation;



Ozone Photometer

In ozone photometer, a mercury lamp is used as light source, from which light beam travels through two window glasses and, a gas chamber, to reach a sensor to convert the light into electric signal.Temperature control circuit, heating device and thermistor are used to control the temperature of lamp holder and ensure stability of temperature.

Technical Data

Principle
Standard Range
Zero Noise
Span Noise
Display
Lower Detectable Limit
Zero Drift
Span Drift
Linearity
Precision
Response Time
Sample Flow Rate
Calibration
Data Transmission
Operating Temperature
Operating Temperature
Operating Humidity
Power Requirement
Dimensions and Weight

	Data Storage and Analysis
d	Stored data are easily retrievable through
S	the serial or Ethernet port via PC
mber,	clientsoftware, allowing operators to
ectric	perform predictive diagnostics and
evice	enhanced data analysis by tracking
erature	parameter trends.
rature	

Data Storage and Analysis

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UV Photometric
US EPA Specification 0~500 ppb
0.4ppb (RMS)
0.5%F.S
Digital
0.8ppb (RMS)
<0.5%F.S/month
<1%F.S/month
<1%F.S.
<1%
T90<30s
(800±80)sccm
Multi-point Calibrator
2 channel analog (4~20) mA; 2 analog (0~5) V;
12 digital input/output; 4-way relay output;
RS232/RS485/Ethernet
US EPA Specification 20~30°C;
Actual applicable: 5~40°C
0~95%RH (No condensation)
220±10%V AC/50±10%Hz; 110V/60Hz
178(H)×432(W)×597(D)mm, 15kg