MODEL 465M

Process Ozone Monitor

- Ideal for water treatment applications -

- UV Absorption Method
- Microprocessor controlled
- Menu driven software
- Ranges 0-1000 ppm to 0-10,000 ppm
- Built-in diagnostics
- Self-check warning alarms
- Fast response times
- Minimal zero drift
- Sample Conditioning System for sampling from humid environments
- Programmable concentration alarms
- Temperature and pressure compensation (standard)
- Optional Ethernet

The Model 465M is a microprocessor based medium range ozone monitor for measuring process ozone concentrations in water treatment, food processing, and research applications. The design has been specifically optimized for applications requiring the measurement of ozone at near-ambient pressure such as water treatment contactor off-gas measurement. The Model 465M has been designed to give accurate and stable readings over long time periods with little or no maintenance or calibration. The Model 465M is available in a NEMA 4X wall mount enclosure.

The sensor module contained in the Model 465M uses detectors which have a very narrow band of spectral sensitivity, eliminating the need for UV band pass filters which are subject to deterioration by UV or humidity. Two detectors are used: one for the ozone measurement, and the other to compensate for changes in UV lamp intensity.

Built-in diagnostics provide warning signals in case operating parameters are out of range. Test values can be viewed while the Model 465M is operating. These displays, warnings, and self-diagnostics, along with the modular design, allow maximum uptime. In addition, any function that can be set or monitored from the front panel can be remotely set or viewed through the bi-directional RS-232 port.

Applications

- Water treatment applications
- Pharmaceutical industry
- Semiconductor
- Food and beverage
- Other industrial processes

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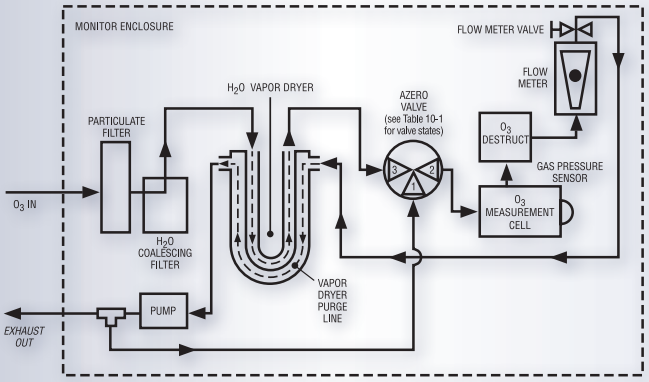
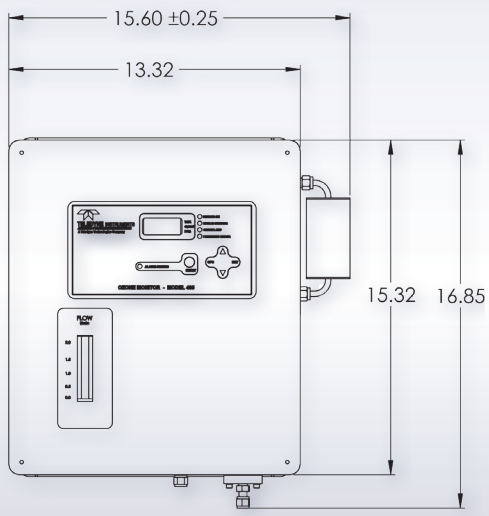
Specifications

Measurement Principle	UV Absorption (Beer Lambert Law)
Ranges	0-1,000 ppm to 0-10,000 ppm 0-5g/Nm³ to 0-50 g/Nm³ 0-1% w/w to 0-3% w/w
Measurement Units	% w/w, g/Nm³, ppm
Accuracy	± 1% of Full Scale
Precision/Repeatability	± 0.5% of Full Scale
Display Resolution	1 ppm, 0.001 % w/w, 0.01 g/Nm³
Response Time	<45 seconds to 95%
Compensation	Pressure, Temperature (NTP = 273.15K, 760mmHg)
Gas Inlet Pressure Range	11.0 – 16.0 psia
Gas Flow Rate	0.8 LPM
Temperature Range	5-45°C
Dimensions (H x W x D)	NEMA 4X – 16.85" x 15.60" x 6.90" (428 mm x 396 mm x 175 mm)
Weight	NEMA 4X – 17.2 lbs (7.8 kg)

Power	110-240V, 50/60Hz, 74W
Analog Output	0-5V or 4-20mA isolated output
Status Outputs	System OK, Invalid Reading, UV Lamp Fault, Pneumatic Error
RS-232 (Optional RS-485)	57.6 Kbaud, DB-9 connector
Approvals	CE
Degree of Protection (NEMA)	IP65 (NEMA 4X)
Warranty	1 year



465M schematic



System dimensions (inches)

— OZONE INSTRUMENTATION FOR EVERY APPLICATION —

Model	Generator Output	Off Gas Detection	Safety / Leak Detection	Dissolved Ozone	Spot Checking
465L		●	●		
465M		●	●		
465H	●				
454	●	●			
452	●				
430			●		●
W1 + 465L				●	
470				●	

Specifications subject to change without notice. All specifications are based on constant conditions.

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QUALITY SYSTEM CERTIFICATION DNV·GL ISO 9001