

MODEL 480M

## Process Ozone Monitor

Ideal for water treatment applications -



- UV Absorption Method
- Intuitive graphical user interface
- Mercury-free UV LED source
- Ranges 0-1000 ppm to 0-10,000 ppm
- Built-in diagnostics/error logs/warning alarms
- Modular internal design
- Minimal zero drift
- Sample Conditioning System for sampling from humid environments
- Programmable concentration alarms
- Temperature and pressure compensation (standard)
- Ethernet standard, WiFi (coming soon)

The Model 480M is a state-of-the-art medium range ozone monitor. 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 480M provides accurate and stable readings over long time periods and was designed with the user in mind. The modular design allows for easier field serviceability. The Model 480M is housed in a splash-proof NEMA 4X wall mount enclosure.

The sensor module contained in the Model 480M 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 source intensity.

The mercury-free UV LED source in the detection cell makes this process ozone monitor the first of its kind.

A self-adjusting pump allows for longer pump life. Improved communication interfaces allow for greater productivity.

Built-in diagnostics provide warning signals in case operating parameters are out of range. Test values can be viewed while the Model 480M 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.

## **Applications**

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

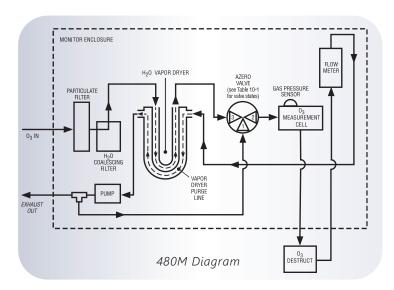


## **Process Ozone Monitor**

## **Specifications**

Measurement Principle	UV Absorption (Beer Lambert Law)		
<ul><li>Ranges</li></ul>	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		
<ul> <li>Measurement Units</li> </ul>	% w/w, g/Nm³, ppm		
<ul><li>Accuracy</li></ul>	± 1% of Full Scale		
<ul> <li>Precision/Repeatability</li> </ul>	± 0.5% of Full Scale		
<ul><li>Display Resolution</li></ul>	1 ppm, 0.001 % w/w, 0.01 g/Nm <sup>3</sup>		
<ul> <li>Response Time</li> </ul>	<45 seconds to 95%		
<ul><li>Compensation</li></ul>	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		
<ul><li>Dimensions (HxWxD)</li></ul>	NEMA 4X – 17.15" x 15.96" x 6.80" (435.7 mm x 405.4 mm x 172.7 mm)		
<ul><li>Weight</li></ul>	NEMA 4X – 17.6 lbs (8kg)		

<ul><li>Power</li></ul>	110-240V, 50/60Hz, 74W		
<ul><li>Analog Output</li></ul>	0-5V or 4-20mA isolated output		
<ul><li>Status Outputs</li></ul>	Optically isolated Digital Outputs Sensor OK, Invalid Reading, Check Lamp, Pneumatic Error 24VDC, 30mA per output		
High Current Relay Outputs	SPDT Form C Dry contact, 250VAC/5A (System OK, HI Alarm, HI-HI Alarm)		
<ul> <li>Communication Interface</li> </ul>	RS-232, RS-485 Ethernet WiFi (coming soon)		
<ul> <li>Approvals</li> </ul>	CE		
<ul> <li>Degree of Protection (NEMA)</li> </ul>	IP65 (NEMA 4X)		
<ul><li>Warranty</li></ul>	1 year		





System Dimensions (inches)

OZONE INSTRUMENTATION FOR EVERY APPLICATION —							
Model	Generator Output	Off Gas Detection	Safety / Leak Detection	Dissolved Ozone	Spot Checking		
480L			•				
480M			•				
480H	•						
454	•	•					
452	•						
430					•		
W1 + 480L				•			
470				•			

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

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