



MODEL 454

# Process Ozone Monitor

- Ideal for process applications -



## Features

- Ranges 0-5% w/w to 0-25% w/w
- DIN panel mount
- High visibility, 4-digit display
- Temperature and pressure compensation
- Units in % w/w or g/Nm<sup>3</sup>
- Narrow bandwidth detector eliminates need for UV filters
- Analog and RS232/485 outputs
- Status LEDs to monitor performance
- 316 stainless steel cell

The Model 454 is a microprocessor based gas monitor for measuring mid to high concentrations of ozone in oxygen or air. Available in a standard DIN panel mount configuration with a 4-digit LED display, the compact design provides ease of mounting and installation.

The 454 Series is available in full scale ranges from 0-5% w/w to 0-25% w/w, 0-100 g/Nm<sup>3</sup> to 0-500 g/Nm<sup>3</sup> and is factory calibrated in accordance with International Ozone Association standards. The measurement principle is based on the absorption of UV light at 254nm. As the sample containing ozone flows through the absorption cell, it is exposed to UV light at the 254nm wavelength. The amount of absorption by ozone is measured by a narrow bandwidth UV detector.

A reference detector measures the lamp output to compensate for changes in light intensity. This method, using a narrow spectrum UV

source and a narrow bandwidth detector, provides excellent performance and stability without requiring additional UV filters.

The 454 Series includes temperature and pressure compensations that produce measurements which are normalized to standard conditions. A front panel keypad displays concentration or cell pressure, while LEDs indicate monitoring status. The units employ a state-of-the-art microprocessor design to provide accurate, dependable monitoring of the ozone process.

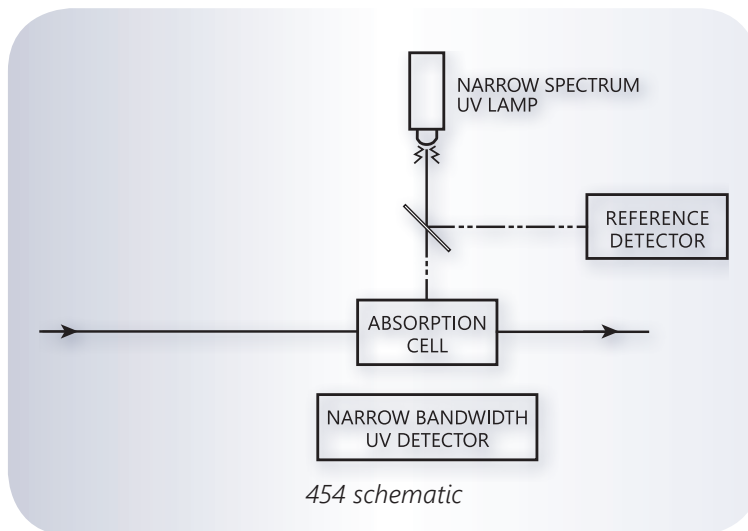
## Applications

- Semiconductor
- Pharmaceutical industry
- Water treatment applications
- Food and beverage
- Various process applications

# Process Ozone Monitor

## Specifications

• Ranges	0-5, 0-10, 0-15, 0-20, 0-25% w/w 0-100, 0-200, 0-300, 0-400, 0-500 g/Nm <sup>3</sup>	• Flow	0.5 to 2.0 LPM
• Pressure & Temp Compensation	Standard	• Power	90-265VAC, 50/60Hz
• Cell Pressure	7 to 30 psia	• Display	4-digit LED readout
• Proof Pressure	100 psig	• Analog Outputs	0-5V full scale; 4-20mA or 0-20mA isolated outputs optional
• Accuracy	1% of full scale	• Zero Calibration	Front panel keypad, contact closure input
• Repeatability	0.5% of full scale	• Digital Outputs	Sensor OK, Lamp Low, Cell Dirty, Invalid Reading (Opto-isolated)
• Response Time	< 30 seconds to 95%	• Serial Outputs	RS232 or RS485
• Zero Drift	1% full scale/month (non-cumulative)	• Dimensions (W x H x D)	3.83" x 7.61" x 7.63" (97 mm x 193 mm x 194 mm)
• Temperature Range	5° to 45°C	• Weight	4.0 lbs (1.8 kg)
• Wetted Materials	316 Stainless Steel, PTFE, Sapphire, AIO <sup>3</sup>	• Warranty	1 year
• Fittings	1/4" stainless steel		



— 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.

Printed documents are uncontrolled. SAL000019C (DCN 8003) 10.15.18