

MODEL 450H

SINGLE CHANNEL

Process Ozone Monitor



The Model 450H UV Photometric Ozone Monitor is an extremely stable analyzer, ideal for monitoring process ozone in water

treatment plants, critical semiconductor processes and other applications that require long term stability and high accuracy. The Model 450 has been designed for ease of use and to deliver excellent accuracy, stability and reliability. It is available in 19" rack mount and NEMA 4X wall mount enclosures. Operating parameters such as process alarm settings and units of measurement can be easily set up in the field using the operator-friendly, menu driven software. Built-in diagnostics provide visual and audible warning signals if operating values deviate beyond acceptable limits, predicting possible future malfunctions. Test values can be viewed while the Model 450H is operating. These displays, warnings, and self-diagnostics, along with plug-in cards, allow the Model 450H to be quickly repaired. In addition, any function that can be set or monitored from the front panel keyboard display can be remotely set or viewed through the bi-directional RS-232 port. Factory calibration is per the International Ozone Association's KI procedure.

UV Absorption Method

Ranges 0-100, 200, 300, 400 g/m³
(w/w, g/Nm³ available)

Microprocessor controlled

Built-in diagnostics

Self-check warning alarms

Fast response times

Minimal zero drift

Programmable concentration alarms

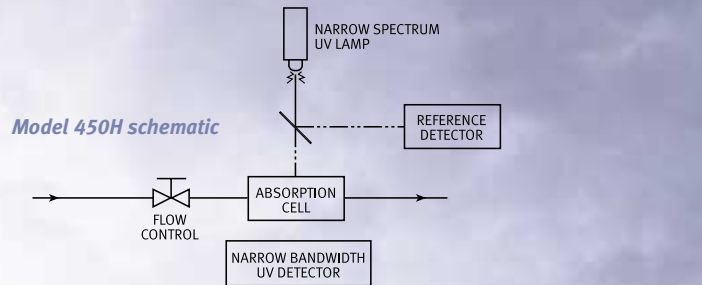
Pressure, temperature, molecular weight
compensation

No switching valves for measurement

Internal Flow Control

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SPECIFICATIONS

Measuring Principle:	UV Absorption (Beer Lambert Law)	Diagnostics:	Auto checking with auto alarms
Measurement Range:	0-100, 200, 300, 400 g/m ³ Optional: 0-5, 0-10, 0-15, 0-20% w/w; 0-100, 200, 300, 400 g/Nm ³	Dimensions (HxWxD):	Rackmount – 7” (178 mm) x 17” (432 mm) x 18.2” (463 mm); NEMA 4 – 19.50” (495 mm) x 17.25” (438 mm) x 9.63” (245 mm)
Units:	Operator selectable: g/m ³ ; g/Nm ³ ; % w/w	Weight:	Rackmount – 24 lbs (11 kg) NEMA 4 – 33 lbs (15 kg)
Precision/Repeatability:	±0.5% of full scale	Power:	100VAC to 240VAC, 50/60 Hz
Resolution:	0.1 g/m ³	Wetted Materials:	PFA; AlO; Kalrez; Sapphire; 316 SS; borosilicate glass (filter)
Linearity:	1%	Fittings:	1/4 stainless steel compression fittings
Zero Drift:	1% of F.S./month, non-cumulative, no drift with auto zeroing	Approvals:	CE
Compensation:	Optional pressure, temperature, molecular weight	Analog Output:	100mV, 1V, 5V, 10V (operator selectable); 4-20mA or 0-20mA isolated outputs optional
Sample Flow Rate:	0.5 to 2 LPM	Status Outputs (Opto-isolated):	System OK; Pressure Warning; Temperature Warning; Automatic Zeroing; UV Lamp Low; Overrange; Optics dirty; Invalid reading; Low-flow (option)
Temperature Range:	5°C to 45°C	Control Input:	Zero Cal (c.c.)
Gas Delivery Pressure:	5 to 30 psig	Serial Output:	Bi-directional RS232
Response Time:	<2 seconds to 95%		
Relay Outputs:	Alarm #1; Alarm #2; System OK; 250V at 3A Form C relays		
Relay Mode:	Latching or non-latching (operator selectable)		

HOW TO ORDER

Model 450H Process Ozone Analyzer

Includes:

- Flow Control
- Analog voltage output
- Status output and remote zero cal input
- Particulate filter

Specify range:

- | | | |
|---|--|----------------------------------|
| <input type="checkbox"/> 100 g/m ³ | <input type="checkbox"/> 100 g/Nm ³ | <input type="checkbox"/> 5% w/w |
| <input type="checkbox"/> 200 g/m ³ | <input type="checkbox"/> 200 g/Nm ³ | <input type="checkbox"/> 10% w/w |
| <input type="checkbox"/> 300 g/m ³ | <input type="checkbox"/> 300 g/Nm ³ | <input type="checkbox"/> 15% w/w |
| <input type="checkbox"/> 400 g/m ³ | <input type="checkbox"/> 400 g/Nm ³ | <input type="checkbox"/> 20% w/w |
| <input type="checkbox"/> _____ | <input type="checkbox"/> _____ | <input type="checkbox"/> _____ |

Specify voltage/frequency:

- | | |
|---|------------------------------------|
| <input type="checkbox"/> 100V/50hz | <input type="checkbox"/> 100V/60hz |
| <input type="checkbox"/> 220V/50hz | <input type="checkbox"/> 115V/60hz |
| <input type="checkbox"/> 230V/50hz (CE) | <input type="checkbox"/> 220V/60hz |
| <input type="checkbox"/> 240V/50hz | |

Specify output voltage:

- 10V 5V 1V 100mV

Additional Options:

- Rack Mount (19”) with chassis slides
- Rack Mount only
- NEMA 4X enclosure

- Isolated 0-20mA or 4-20mA output
- Low Flow Alarm
- O₂ Destructor
- Front Panel Flowmeter
- Pressure/temperature compensation
- Zero calibration valve

Accessories:

- Expendables Kit
- Spare Parts Kit

For more information on API's family of monitoring instrumentation products, call us or visit our website at www.advpol.com