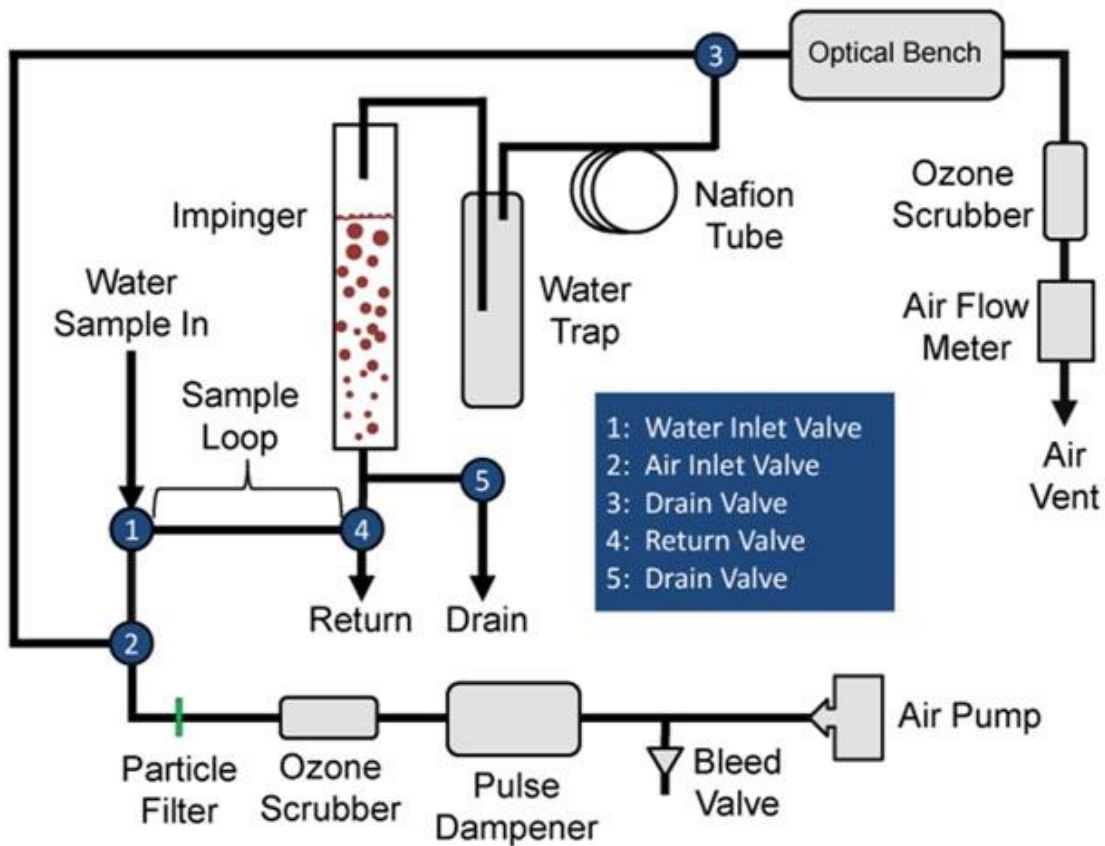


Model UV-106-W Aqueous Ozone Monitor™ MicroSparge™ Technology



The Model UV-106-W Aqueous Ozone Monitor™ uses our patented MicroSparge™ technology to measure dissolved ozone in water with high precision and accuracy. Unlike most dissolved ozone sensors, the instrument does not make use of a membrane that will foul over time. Instead, dissolved ozone is measured by nearly complete sparging of ~2 mL of water and integrating the gas-phase concentration of ozone stripped from solution. A small correction, based on the temporal profile of ozone removed from solution, is applied to account for any ozone remaining in solution. Because ozone is measured in the gas phase, interferences from particles and dissolved inorganic and organic compounds are removed, making the instrument applicable to both ultra pure water and “dirty” water, such as drinking water, which can contain a wide variety of dissolved inorganic and organic impurities and suspended particles.

Schematic Diagram



Features

- Interference-free measurement of dissolved ozone in ultra pure or "dirty" water
- NEMA water-proof housing
- New measurement every 10 s
- Internal data logger logs 16,368 lines of data
- Precision and accuracy of 0.05 ppm or 1% of reading
- Both serial and user-scaleable analog outputs (0-2.5 V and 4-20 mA)
- Selectable data averaging times of 10 s, 1 min, 5 min and 1 hr
- LED alarms

Options

- Breakout box for power, RS232, 0-2.5 V and 4-20 mA connectors, and 2 relays
- Serial-to-USB adapter

Specifications

Measurement Principle (Absolute Method)	Integrated UV Absorbance of Ozone Completely Sparged from ~2 mL of Water Sample
Applications	Ozone in Clean or “Dirty” Water
Ozone Concentration Range	0-100 ppm (g/m ³ , µg/mL)
Precision	Greater of 0.05 ppm or 1% of Reading
Accuracy	Greater of 0.05 ppm or 1% of Reading
Zero Drift	< 0.05 ppm per month
Measurement Frequency	10 s
Response Time	20 s
Averaging Times	10 s, 1 min, 5 min, 1 hr
Ozone Units Displayed	ppm, µg/mL, mg/L, g/m ³
Power Requirements	11-14 V DC, 2.2 A at 12 V, 26.4 Watts
Average Sample Water Flow Rate	300 cc/min
Pressure Range	0-50 psi (>100 psi Burst Pressure)
Housing	NEMA
Relays (2 in Optional Breakout Box)	0.1 ppm Resolution, 2-Level, SPDT Dry Contacts
Analog Outputs	4-20 mA, 0-2.5 V (2 point scalable)
Digital Outputs	LCD, RS232, USB
Logging	Internal Data Logger, 16,368 lines (10 s avg. = 1.9 days; 5 min avg = 57 days)
LED Alarms	Low Lamp, Low Flow, Invalid Measurement
Dimensions	13.3 x 12.0 x 7.3 in (33.8 x 30.5 x 18.5 cm)
Weight	14.5 lb (6.6 kg)

System Includes

- Model UV-106-W Aqueous Ozone Monitor
- AC Power Adapter (100-240 VAC to 12 VDC) with Country-Specific Plug
- Battery Wire Connector
- Operation Manual on USB Stick
- Calibration Data and Certificate
- Instrument Birth Certificate
- One-Year Warranty