

Ultra DI[®] 50

Liquid Optical Particle Counter



Ultra DI particle counters are designed specifically for deionized (DI) water systems and will count and size contaminants as small as 0.05 microns. The Ultra DI particle counter's low zero count, large sample volume, and high counting efficiency provide unsurpassed performance.



BENEFITS

Rapid Analysis

- Quickly obtain meaningful statistical data with Ultra DI's large sample volume
- Save operator time with fast cleanup and the ability to move quickly from one sample point to another
- Speed up analysis time by using shorter sample intervals

Process Improvement

- Larger sample volumes and ultra-low zero counts detect smaller excursions with more relevant statistical data
- Respond immediately to contamination with real-time measurement of particles
- Facility Net software provides more sophisticated process control with: alphanumeric paging, sensor status, tabular and SPC charts, time plots, and historical event log records
- Set tighter process control limits with low sample-to-sample variation
- Detect process variations more quickly with improved sensitivity: 0.05 microns

Easy to Use

- Utilize existing network with Ethernet communication
- Connect directly to PLC and SCADA systems with 4-20 mA
- Compatible with ozonated water
- Stainless steel housing and dual HEPA filtration allow use in dirty environments

APPLICATIONS

- Quantifying particle concentration in state-of-the-art ultra pure water (UPW) systems
- Filter efficiency measurements
- Trending analysis at lower particle concentrations
- Detecting bacterial growth in UPW systems
- Episodic event tracking and alarming
- Continuous system monitoring
- Manufacturing process control

Without measurement, there is no control.

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specifications

Size range	0.05-0.20 μm
Channels	4
Channel sizes	0.05, 0.10, 0.15, 0.20 μm
Flow rate (ml/minute)	1000 mL/minute \pm 10%
Counting efficiency	100% sample volume
Sample volume	\geq 3.75 mL/minute
Maximum concentration ¹	10,000 counts/mL
Sample temperature ²	15-50°C
Maximum pressure	100 psi
Zero count	\leq 50 counts/liter
Exterior surface	Stainless steel
Wetted surface materials	Teflon [®] , Kel-F [®] , fused silica, sapphire, Viton [®] , NG1 glass, and Simraz [®]
Dimensions (l, w, h)	10 x 14 x 17 inches (25 x 35 x 42.5 cm)
Weight	45 lbs. (20.45 kg)
Power	100-125 or 208-240 V, 50-60 Hz
Communications	Ethernet, 4-20 mA (three outputs: two particle channels, one instrument status), RS-232 (setup and diagnostics only, no data)
Status indicator	Laser, power, and activity: one (1) tri-color LED
Calibration	Materials used are traceable to U.S. National Institute of Standards and Testing (NIST) and/or Japanese Institute of Standards (JIS).
Environment	Temperature: 15-30°C, Humidity: non-condensing

¹Greater than 90% accuracy (less than 10% coincidence loss) at the maximum recommended concentration.

²For temperatures greater than 50°C, use of a chiller is recommended.

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Registration applies to the Boulder, Colorado facility.

AUTHORIZED REPRESENTATIVE



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