HSLIS e-Series™

Liquid Optical Particle Counter

Provides continuous, real-time monitoring of contamination levels in DI water and process chemicals.

Without measurement there is no control ®

The HSLIS e-Series (High Sensitivity Liquid In Situ) particle counter provides continuous, real-time monitoring of contamination levels in DI water and process chemicals. The combination of high sensitivity and low cost makes it ideal when large numbers of sensors and/or long term trending are required.

The HSLIS e-Series has sizing sensitivity down to 0.05 µm in DI water and 0.065 µm in process chemicals.

Integration of the HSLIS e-Series into Particle Measuring Systems' Facility Net software provides an economical way to monitor multiple flow systems and provide dedicated local display and control capabilities.

BENEFITS

- Monitor for long term trends in fluid quality
- Control and monitoring of multiple particle counters using Ethernet
- Low initial capital investment and lower maintenance cost with proven reliability of the HSLIS design
- Tabular and statistical process control (SPC) charts for detailed statistical information
- Alphanumeric paging and e-mailing functions to alert operator of data excursions
- Sensor status displays four-level alarm for monitoring out-of-spec condition
- Simplified data interpretation with real-time and retrieved time plots

FEATURES

- 4 channels
- 0.05, 0.1, 0.15, 0.2 µm size range
- Operates with an optimal flow rate of 100 ml/min ± 10%
- Samples 0.25% of the flow volume or 0.25 ml/min
- Compatible with Facility Net software
- Existing network can be utilized with ethernet communication to Facility Net software

APPLICATIONS

- Real-time particle monitoring within chemical distribution systems
- Point-of-process monitoring
- Chemical packaging operations monitoring
- Chemical filter performance and efficiency characterization
- Performance testing of chemical handling components

PARTICLE MEASURING SYSTEMS®
a spectris company

HSLIS e-Series

Liquid Optical Particle Counter

Specifications

	M50e	M65e	M100e
Size range	0.05 – 0.2 µm	0.065 – 0.2 µm	0.1 – 1.0 µm
Channels	4		
Channel sizes	0.05, 0.1, 0.15, 0.2 µm	0.065, 0.1, 0.15, 0.2 µm	0.1, 0.2, 0.5, 1.0 µm
Flow rate	100 ml/min ± 10%	100 ml/min ± 10%	300 ml/min ± 10%
Sample volume	0.25 ml/min	0.6 ml/min	3.0 ml/min
Counting efficiency	100% of sample volume		
Maximum concentration	10,000 counts/ml		
Sample temperature	185 °F (85 °C)	212 °F (100°C)	212 °F (100°C)
Zero count	< 1000 counts/liter	< 2000 counts/liter	< 1000 counts/liter
Wetted surface materials	Delrin®, Teflon®, Viton®, fused silica	Kalrez 4079, Neoflon®, Teflon, sapphire	Kalrez 4079, Neoflon, Teflon, sapphire
Dimensions (L x W x H)	21 x 10.75 x 7 in (53 x 27 x 18 cm)		
Weight	28 lb (13 kg)		
Power	85 – 250 VAC, 50 – 60 Hz		
Calibration	Materials used are traceable to US National Institute of Standards and Technology (NIST) and/or Japanese Institute of Standards (JIS).		
Environment	Temperature: 50 – 95 °F (10 – 35 °C); Humidity: non-condensing		
Communications	Ethernet, 4-20 mA (5 outputs; 4 particle channels, 1 instrument status) RS-232 (set-up and diagnostics, no data)		

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

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COMMITTED TO Net Zero

BUSINESS AMBITION FOR 1.5°C