

# LiQuilaz®

## Particle Counting Spectrometer for Liquids



The LiQuilaz® optical particle counters are volumetric particle counters with a variety of sizing sensitivities as low as 0.2  $\mu\text{m}$ . They provide high-precision analysis for most process chemicals, including hydrofluoric acid and hot corrosive chemicals up to 306 °F (150 °C).

Volumetric particle counters offer the highest precision possible by measuring 100% sample volumes (up to 80 ml/min) so that short sampling intervals can be utilized without sacrificing statistical significance.

### BENEFITS

#### Yield Improvement

- Real-time characterization and analysis of particle contamination allows for immediate response to contamination
- Volumetric measurements provide greater accuracy for tighter process control
- Optional software makes process control easy with alarm settings, status conditions, sampler setup, and online help

#### Versatile

- Supports a wide range of applications and fluids
- Works with compression or syringe samplers
- Compatible with various tubing standards
- In-line and batch sampling capabilities
- RS-485 networking compatibility

#### Easy to Use

- Small footprint for easy placement anywhere in the process
- Flexible software provides numerous viewing options for real-time or retrieved data
- User-selectable particle size thresholds

### APPLICATIONS

- Effervescent chemical measurements using compression sampling
- Chemical quality assurance
- Process bath monitoring
- DI water monitoring
- Chemical delivery systems
- Photoresist monitoring



Without measurement there is no control.

	LiQuilaz S02	LiQuilaz S03	LiQuilaz S05
Size range	0.2 – 2.0 µm	0.3 – 3.0 µm	0.5 – 20.0 µm
Channels	15	15	15
Flow rate	50 ± 10% ml/min	80 ± 10% ml/min	80 ± 10% ml/min
Sample volume	Volumetric 50 ml/min (100%)	Volumetric 80 ml/min (100%)	Volumetric 80 ml/min (100%)
Maximum concentration*	10,000 particles/ml		
Sample temperature	50 – 306 °F (10 – 150 °C) Sulfuric acid: max. 212 °F (100 °C)		
Zero count	< 25 counts/liter	< 15 counts/liter	< 15 counts/liter
Maximum pressure	100 psi		
Laser source	Laser diode		
Wetted surface materials	Teflon®, Kel-F®, sapphire, Kalrez® 4079		
Dimensions (l, w, h)	13 x 4 x 5 in (32 x 10 x 11 .5 cm)		
Weight	6 lb (2.7 kg)		
Power	85 – 132 V or 220 – 240 V, 50 – 60 Hz	85 – 250 V, 50 – 60 Hz	85 – 250 V, 50 – 60 Hz
Communications	RS-485		
Calibration	Materials used are traceable to U.S. 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		

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