

# Syringe Liquid Sampler

with UltraChem® 100 Particle Counter



The SLS Syringe Sampling System is ideal for applications where precise, small-volume sampling is needed.

The system consists of a syringe sampler for either corrosive or non-corrosive liquids, a particle counter for different sizing sensitivities, and software.

A convenient naming system identifies the particle counter installed inside the instrument (see the Specifications table).

## BENEFITS

- Precise particle measurement
- Versatile - select various particle sensors and syringe sizes
- Cost-effective
- Easy-to-use
- Small sample volume - eliminates sample waste

## FEATURES

- Proven PMS UltraChem particle sensors
- Menu-driven data collection - 1, 5, 10 and 25 ml
- Wetted materials compatible with corrosive chemicals
- Compact design with on-board particle sensor

## APPLICATIONS

- Diverse applications in semiconductor and process chemical manufacturing
- Incoming quality measurement of process chemicals
- Point-of-process monitoring on process tools
- Testing and qualification of chemical components
- Outgoing chemical qualification testing
- Mechanical parts cleanliness testing

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Specifications

## SLS-1100

Syringe size	25 ml
Sampling mode	Vacuum, Batch
Minimum sample size	0.4 ml @ 20 ml/min
Wetted surface materials	Glass, Teflon (all fluoropolymer materials optional)
Power	100 - 240 V, 50 - 60 Hz
Sample volume	Adjustable using software interface
External Dimensions (l, w, h)	15 x 9 x 17.1 in (38.1 x 22.0 x 43.4 cm)
Weight	42 lb (19.1 kg)
Environment	Temperature: 50 – 86 °F (10 – 30 °C) Humidity: Non-Condensing Indoor use only Pollution degree 2 Over-voltages (transients) Category II Ordinary protection (not protected against harmful ingress of moisture) Class I equipment (Electrical earth ground from the mains power source to the product input is required for safety purposes)

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

\*\* Compatible with hydrofluoric acid sampling.

## UltraChem 100

SLS instrument label	SLS-1100
Size range	100 - 500 nm
Channels	100, 200, 300, 500 nm
Flow rate	20 ml/min
Sampled %	30% Monitor mode 16% Spectrometer mode 13% High-Scatter mode
Maximum concentration*	3,000 particles/ml, Monitor mode 9,000 particles/ml, Spectrometer mode 15,000 particles/ml, High-Scatter mode
Zero count	< 50 counts/l
Maximum pressure	Ambient pressure
Laser source	Laser diode Class I, complies with US 21 CFR 1040.10 and EN 60825-1. Internally an enclosed Class 4 laser is used per EN 60825-1.
Sample temperature	50 - 122 °F (10 - 50 °C)
Wetted surface materials	Sapphire**, Teflon, Kel-F®
Calibration	Materials used are traceable to National Institute of Standards & Technology (NIST) and/or Japanese Industrial Standards (JIS).
Software	SamplerSight

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## HEADQUARTERS

5475 Airport Blvd  
Boulder, Colorado 80301 USA  
T: +1 303 443 7100, +1 800 238 1801

Instrument Service & Support  
T: +1 800 557 6363

Customer Response Center  
T: +1 877 475 3317  
E: info@pmeasuring.com

www.pmeasuring.com  
info@pmeasuring.com



## GLOBAL OFFICES

AUSTRIA  
T: +43 512 390 500  
E: pmsaustria@pmeasuring.com

BENELUX  
T: +32 10 23 71 56  
E: pmsbelgium@pmeasuring.com

BRAZIL  
T: +55 11 5188 8227  
E: pmsbrazil@pmeasuring.com

CHINA  
T: +86 21 6113 3600  
E: pmschina@pmeasuring.com

FRANCE  
T: 33(0)1 60 10 32 96  
E: pmsfrance@pmeasuring.com

GERMANY  
T: +49 6151 6671 632  
E: pmsgermany@pmeasuring.com

ITALY  
T: +39 06 9053 0130  
E: pmsrl@pmeasuring.com

JAPAN  
T: +81 3 5298 8175  
E: pmsjapan@pmeasuring.com

KOREA  
T: +82 31 286 5790  
E: pmskorea@pmeasuring.com

MEXICO  
T: +52 55 2271 5106  
E: pmsmexico@pmeasuring.com

NORDIC  
T: +45 707 028 55  
E: pmsnordic@pmeasuring.com

PUERTO RICO  
T: +1 787 718 9096  
E: pmspuertorico@pmeasuring.com

SINGAPORE  
T: +65 6496 0330  
E: pmsingapore@pmeasuring.com

SWITZERLAND  
T: +41 71 987 01 01  
E: pmsswitzerland@pmeasuring.com

TAIWAN  
T: 886-3-5525300 Ext: 301  
E: pms taiwan@pmeasuring.com