

# APSS-2000

## Automated Parenteral Sampling System



The APSS-2000 syringe sampling system sizes and counts suspended particulate matter in a wide range of liquids and meets or exceeds all current USP, EP, and JP requirements. Recipe functions allow the APSS 2000 to adapt to future regulatory changes.

The APSS-2000 system consists of an SLS-1000 syringe sampler, a LiQuilaz® E Series light obscuration spectrometer, and SamplerSight-Pharma software, allowing reports to meet 21 CFR 11 "Electronic Records and Signatures" rulings.



### BENEFITS

#### Defect Reduction

- 100% sample volume for greater accuracy
- A precise sample volume within 0.1 ml is achieved with the syringe sampler, producing repeatable results
- SamplerSight-Pharma software comes with a Validation Information Notebook, providing comprehensive software development documentation and full IQ, OQ, and PQ protocols
- SamplerSight-Pharma complies with FDA 21 CFR 11

#### User-Friendly

- Reduce operator error and ensure process accuracy with recipes for repeat sample processing to USP, EP, or JP standards
- Automated particle counter calibration wizard for full calibration or routine verification
- Alarm levels for pass/fail criteria ensure quality control

#### Comprehensive System

- Easy-to-use, pull-down menus
- Security password maintains system integrity
- Particle measurements are reported per ml or per container values
- Small sample volume minimizes waste of expensive product
- Various custom report formats are available

### FEATURES

- Sizing capability from 1.5 to 125  $\mu\text{m}$
- Fifteen user-selectable sizing channels
- Meets and exceeds all USP, EP and JP requirements
- Sample volumes from 0.2 ml to 1 liter
- Adaptors for SVI and IV bag testing
- Automated sensor calibration

### APPLICATIONS

- Pharmaceutical parenteral monitoring to USP, EP, JP and FDA standards
- Parts/medical device cleanliness testing
- Laboratory water sampling
- WFI and Purified Water testing
- Filter efficiency testing

Without measurement there is no control.

# APSS-2000

## Automated Parenteral Sampling System

### specifications

Liquid Sensor	LiQuilaz® E-20P	LiQuilaz® E-15P
Location	Internal to SLS-1000	Internal to SLS-1000
Size range	2 – 125 µm	1.5 – 125 µm
Size channels	15	15
Flow rates	10 or 20 ml/min	10 or 20 ml/min
Volume sampled	100%	100%
Maximum concentration	10,000 per ml*	10,000 per ml*
Sample temperature	50 – 122 °F (10 – 50 °C)	50 – 122 °F (10 – 50 °C)
Zero count level	< 1 count per 10 ml	< 1 count per 10 ml
Capillary size	0.5 x 0.7 mm	0.5 x 0.7 mm
Maximum pressure	25 psi	25 psi
Laser source	Laser diode	Laser diode
Wetted surface materials	Fused Silica, Black Quartz, Teflon, Kel-F®, Kalrez®	Fused Silica, Black Quartz, Teflon, Kel-F, Kalrez
Liquid Sampler	SLS-1000	
Syringe size	1, 5, 10, and 25 ml (10 ml is standard and included)	
Sampling mode	Vacuum	
Minimum sample volume	0.4 ml @ 20 ml/min, 0.2 ml @ 10 ml/min	
Wetted surface materials	Glass, Teflon	
Dimensions (l, w, h)	15 x 9 x 17.1 in (38.1 x 22.9 x 43.4 cm) Including particle counter	
Weight (the particle counter)	30 lb (13.6 kg) Including particle counter	
Power	100 – 240 V, 50 – 60 Hz	
Environment	Temperature 50 – 86 °F (10 – 30 °C)	
Humidity	0 – 98% non-condensing	
Software	SamplerSight Pharma	
Operating system	Windows® XP	
Developer	Particle Measuring Systems	
Test procedure	Software Validation Information Notebook	

\*Greater than 90% accuracy (less than 10% coincidence loss) at maximum recommended concentration  
LiQuilaz® is a registered trademark of Particle Measuring Systems, Inc.  
All other trademarks are the property of their respective owners.  
Particle Measuring Systems reserves the right to change specifications without notice.



Particle Measuring Systems Headquarters  
5475 Airport Blvd., Boulder, CO 80301, USA  
Tel: +1 303 443-7100 +1 800 238-1801

FAX: +1 303 449-6870

Instrument Service & Support: +1 800-557-6363

Customer Response Center: +1 877-475-3317

PMS EMEA  
Tel: +44 1684 581 000  
Email: PMSEMEA@pmeasuring.com

Particle Measuring Systems France  
Tel: +33 160 10 32 96  
Email: PMSFrance@pmeasuring.com

Particle Measuring Systems Germany  
Tel: +49 2222 9299 522  
Email: PMSGermany@pmeasuring.com

Particle Measuring Systems Italia  
Tel: +39 06 9053 0130  
Email: PMSItaly@pmeasuring.com

Particle Measuring Systems Nordic  
Tel: +45 707 028 55  
Email: PMSNordic@pmeasuring.com

Particle Measuring Systems China  
Tel: +86 21 6113 3600  
Email: pmschina@pmeasuring.com

Particle Measuring Systems Japan  
Tel: +81 3 5298 8175  
Email: PMSJapan@pmeasuring.com

Particle Measuring Systems Singapore  
Tel: +65 6496 0330  
Email: PMSSingapore@pmeasuring.com

### AUTHORIZED REPRESENTATIVE

Particle Measuring Systems Brazil  
Tel: +55 11 5188 8166  
Email: PMSBrazil@pmeasuring.com

Particle Measuring Systems Mexico  
Tel: +52 55 2271 5106  
Email: PMSMexico@pmeasuring.com

Particle Measuring Systems Puerto Rico  
Tel: +1 787 718 9096  
Email: PMSPuertoRico@pmeasuring.com