



Particle Characterization Analyzers

Laser Diffraction Particle Size Distribution Analyzer

Dynamic Light Scattering Size Measurement

Zeta Potential Determination

Static Image Analysis for Size and Shape

Dynamic Imaging Particle Size/Shape Analyzer

Flowing Gas BET Surface Area Analysis



Your partner in Science!

Laser Diffraction Particle Size Distribution Analyzer partica LA-960



Simple, Powerful, Reliable
10 nm - 5 mm

The LA-960 features intuitive software, unique accessories, and a high performance optical system to deliver actionable results in less than one minute. Even the most challenging applications are easily measured with the innovative Method Expert software guiding the method development process. From ultra-fine nanoparticles to visible particles, they can all be measured with this single instrument. Designed with high quality components, the LA-960 ensures a long lifetime of hassle-free operation.

- AquaFlow - standard system for aqueous dispersions.
- SolvoFlow - upgraded system for organic solvent dispersions.



PowderJet Dry Feeder

When the dry unit is installed, you can switch back and forth between dry and wet measurement by simply sliding the cell tray. The cell can be changed with ease, allowing you to select the necessary measurement procedure at any time.



Fraction Cell

The Fraction Cell makes measurements with only micrograms of sample. This unique accessory is available in 5, 10, and 15 mL volumes and is fully solvent resistant.



Mini Flow

The MiniFlow minimizes sample and dispersant amounts. This miniaturized circulation system features fill and circulation pumps, ultrasonic probe, and drain valve for fully automated operation.



Slurry Sampler

The Slurry Sampler is the ideal solution for high throughput applications with a 30 position sampler featuring control over sample dispersion, dilution, and delivery.



Paste Cell

The Paste Cell measures samples which cannot be diluted or which are dispersed in viscous medium. This unique accessory measures particle size without changing dispersion conditions.




N E W

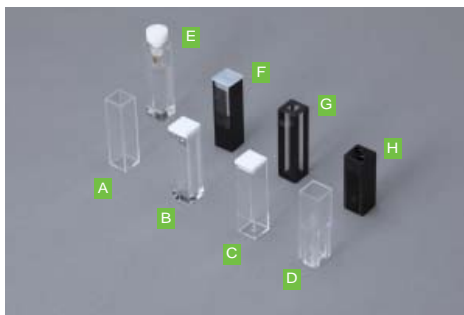
nano **partica** SZ-100 series

The Industry's Widest Range and Highest Precision Measurement Using Dynamic Light Scattering From 0.3 nm to 8 μm

Nano-technology research and development requires controlling substances at the atomic and molecular level in order to achieve new functionality. The miniaturization of materials, control at the nano-level, is necessary to achieve faster, higher-performance devices and to reduce energy consumption. Nano-technology has come to play a key role in wide-ranging fields that affect our daily lives, including food, cosmetics, and the life sciences.

Clear and simple multiple characterization analysis of nano-particles!
Three analyzers in a single-compact box delivers high-sensitivity, high-accuracy analysis of each of these measurement parameters.

-  Particle Diameter Measurement Range 0.3 nm to 8 μm
-  Zeta Potential Measurement -200 to +200 mV
-  Molecular weight 1×10^3 to 2×10^7 g/mol



	Cell Name	Measurement Application	Minimum Sampling Volume	Solvent
A	Disposable cell	Particle diameter/ Molecular weight	1.2 mL	Aqueous
B	Semi-micro cell		500 μL	Aqueous, Non-aqueous
C	Glass cell		1.2 mL	Aqueous, Non-aqueous
D	Semi-micro disposable cell		600 μL	Aqueous
E	Cell with lid		1.2 μL	Aqueous, Non-aqueous
F	Micro-cell (Side detector only)		12 μL	Aqueous, Non-aqueous
G	Sub-micro cell		200 μL	Aqueous, Non-aqueous
H	Flow cell		100 μL	Aqueous, Non-aqueous



Carbon Cells



Our particle expertise = your solutions

HORIBA’s experienced staff of technical and applications specialists support the LA-960 in 54 offices across 45 countries. We are committed to the satisfaction of our users and to the education of the greater industry and provide many channels of support including:

- Sample analysis via the many Applications Labs around the world
- Free software updates, webinars, technical notes, and much more in the Download Center
- Instant support via phone, e-mail, and online meeting
- On-site and in-house user training courses
- Service contracts, verifications, and validations to fit every requirement
- Advanced software tools to correlate data from other particle size analyzers to maintain historic specifications

Laser Diffraction Particle Size Distribution Analyzer
————— • • • • **LA-300**

HORIBA’s Premium Design in an Economical Package
0.1 - 600 µm

Compact, portable, and affordable; the LA-300 measures 0.1-600 µm to cover a wider spectrum of applications at a lower cost than the full range models. The compact size also makes it attractive for applications that require a portable analyzer, such as spot checks at customer sites or at various points at a manufacturing facility. The highly-refined optical design and algorithm provides measurement results in 20 seconds, with superior accuracy and precision. The following options are available:



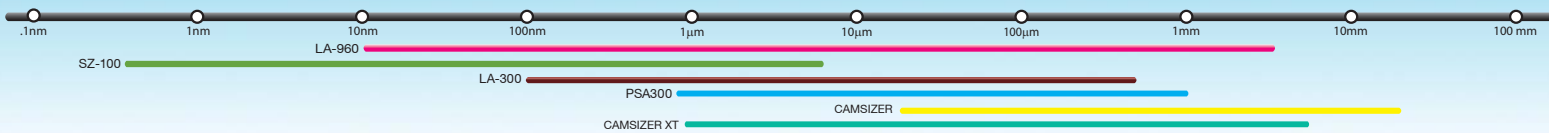
- Auto Fill System
- Slurry Sampler
- Fraction Cell
- Shipping Case



Autofill Pump



Shipping Case



Static Image Particle Size Analyzer

● ● ● ● PSA300

Automated Image Analysis to Measure Particle Size and Shape 0.5 to 1000 µm

The HORIBA PSA300 is a state of the art turn-key image analysis solution. Seamless integration of Clemex's powerful particle characterization software and an automated microscope with high resolution camera creates an intuitive, easy-to-use imaging workstation.

- Reference method for other particle sizing techniques
- Depth profiling for overlapping particles
- Four position Auto Sampler
- Dry Disperser for proper particle dispersion



BET Multipoint Surface Area Analyzer

● ● ● ● SA-9600 Series



SA-9601



SA-9603

Automated, repeatable, accurate measurements.

0.1 to > 2000 square meters per gram

The SA-9600 Series Surface Area Analyzers HORIBA's breakthrough series brings exceptional convenience to surface area analysis. Now you can perform single-point surface area and multi-point surface area measurements with push-button ease.

- Single station or three station configuration
- Single point or multi-point analysis
- Simple low surface area measurement
- Sample prep station available

Digital Imaging Particle Size/Shape Analyzer

● ● ● ● CAMSIZER

Fully Visualized Particle Size and Shape Analysis 30 µm to 30 mm

The CAMSIZER Dynamic Digital Image Processing Particle Size and Shape Analyzer provides rapid and precise particle size and particle shape analysis. It can be used for all dry, flowable bulk materials and powders in the size range from 30µm to 30mm. This technique provides a wide variety of information about the sample, from a general size measurement, to shape parameters determination. These parameters can be closely correlated to specific performance characteristics. This allows correlation to existing data from techniques as diverse as sieving and sedimentation.



- Auto Sampler for routine analyses
- Motorized Guidance Sheet
- Ionizer for sample dispersion of dry materials
- Calibration reticle for ISO traceability

Digital Imaging Particle Size/Shape Analyzer

CAMSIZER XT ● ● ● ●

Measurement of fine powders, granules and suspensions 1 µm to 8 mm



The CAMSIZER XT is an advancement of the well-proven optical measurement system CAMSIZER for finer samples. It features newly developed optics with a higher resolution and enhanced options for sample feeding and dispersion. It is ideal for pharmaceutical powders, granules, fine pellets, pulverized and granulated materials. It covers applications from food to powdered detergent to metal and ore samples, abrasives, fine sands and cement, and also wood or plastic fibers. All of these can be run in either the wet or dry state.

- X-Fall Gravity Module
- X-Flow Wet Module



Please read the operation manual before using any of these products to ensure safe and proper handling.

- The contents of this catalog are subject to change without prior notice and without any subsequent liability to this company.
- The color of the actual products may differ from the color pictured in this catalog due to printing limitations.
- It is strictly forbidden to copy the content of this catalog in part or in full.
- All brand names, product names and service names in this catalog are trademarks or registered trademarks of their respective companies.

<http://www.horiba.com/us/particle> • email: labinfo@horiba.com

HORIBA INSTRUMENTS INCORPORATED

9755 Research Drive, Irvine, California 92618, U.S.A.

Phone: (800) 446-7422 or (949) 250-4811