

LASER LIGHT SCATTERING
DYNAMIC LIGHT SCATTERING
IMAGE ANALYSIS
NANOPARTICLE TRACKING



Your
Partner
in Science

| | LA-960V2 | LA-350 | SZ-100V2 | PSA300 |
|--------------------------------|----------------------------------|---|---|---|
| Technology | Laser Diffraction | Laser Diffraction | Dynamic Light Scattering, Electrophoretic Light Scattering, Debye Plot Method | Static Image Analysis |
| Measurement Output | Particle Size | Particle Size | Particle Size, Zeta Potential, Molecular Weight | Particle Size and Shape |
| Measurement Range | 10 nm to 5000 μm | 0.1 μm to 1000 μm | 0.3 nm to 8 μm | 0.5 μm to 1000 μm |
| Typical Sample Amount* | ~10 mg to 5 g | ~10 mg to 5 g | 100 μL to 3 mL | 1 mg to 10 mg |
| External Dimensions | 705 x 565 x 500 mm | 297 x 429 x 376 mm | 385 x 528 x 273 mm | 686 x 508 x 305 mm |
| Light Source/Resolution | 605 nm Laser Diode 405 nm LED | 605 nm Laser Diode | 532 nm Laser Diode 90°, 173° detectors | 2.1 MP mono camera |

* Amount is sample dependent



The Partica LA-960V2 is a laser diffraction particle size distribution analyzer that is known for its wide dynamic range, speed, excellent performance assurance, and outstanding quality. Its method expert software makes it easy to create a robust, powerful method for research and development purposes as well as quality control. The flexible sample handling, robust platform, and wide size range ensure the LA-960V2 will handle the most extreme demands.



The compact Partica LA-350 laser diffraction analyzer is your routine analysis tool. It can achieve high performance with easy operation and maintenance, excelling at applications as diverse as slurries, minerals, and paper chemistry. It is the ideal combination of performance, price, and packaging to streamline particle size analysis.



The SZ-100V2 Nanoparticle Analyzer is the industry's widest range and highest precision measurement instrument for nanoparticle characterization. It determines three parameters that characterize nanoparticles: particle size, zeta potential, and molecular weight. Dynamic light scattering is used for particle size determination. The uniquely designed cells for zeta potential can measure samples with volumes as low as 100 μL . Enjoy intuitive software as you make dynamic light scattering (DLS) and related measurements.



The PSA300 is a turn-key, static image analysis solution. Seamless integration of powerful particle characterization software and an automated microscope with a high resolution camera creates an intuitive, easy-to-use imaging workstation. It features a dry dispenser for proper particle dispersion and a four position autosampler. Minimum intervention by the operator still yields maximum detail in the results.

| | ViewSizer 3000 | Eyecon ₂ | SA-9600 Series |
|-------------------------------------|--|--|---|
| Technology | Nanoparticle Tracking Analysis** | Direct Imaging Particle Analysis | BET Flowing Gas Adsorption and Desorption |
| Measurement Output | Particle Size | Particle Size and Shape | Surface Area |
| Measurement Range | 10 nm to 15 µm | 50 µm to 5500 µm | 0.1 m ² to 50 m ² |
| Typical Sample Amount* | 350 µL to 1 mL | Continuous monitoring | < 1 g |
| External Dimensions | 550 x 660 x 350 mm | 250 x 128 x 132 mm | 508 x 356 x 356 mm |
| Light Source/ Resolution | 445 nm blue laser, 520 nm green laser, 635 nm red laser with variable power output | 12x3 High intensity, low energy RGB LEDs | NA |

* Amount is sample dependent ** Fluorescence nanoparticle tracking also available

The ViewSizer™ 3000 implements breakthrough improvements to particle tracking technology that include proprietary illumination and detection methods allowing cutting-edge visualization, measurement and number concentration of nanoparticles over a wide range of sizes. The system has unmatched capabilities for characterizing polydisperse assemblages of particles in liquids and can easily resolve separate size modes in complex samples.



The EyeCon₂™ is the number one choice for in-line or at-line digital image analysis. It uses a flash-imaging technique, which emits extremely short light-pulses with Red, Green, and Blue LEDs to illuminate moving particles from multiple angles for image capture. Each particle is then identified, a best-fit ellipse is calculated, the major & minor diameters are computed, and the PSD/D-values are determined.

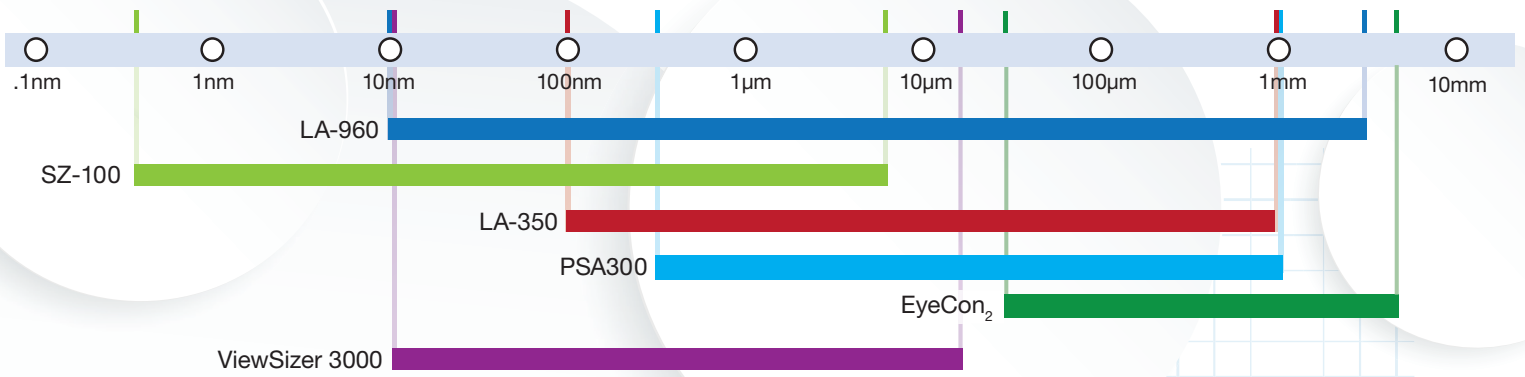


The SA-9600 Series brings exceptional speed and convenience to BET surface area analysis. Measurements are based on flowing gas BET, which monitors nitrogen adsorption to determine surface area. Flowing gas BET is a fast and reliable method for surface area analysis. The SA-9600 allows the user to rapidly determine surface area with push button ease.



HORIBA is your partner in Science. From installation to the end of life, we help ensure your measurements are accurate and repeatable. Our global network of experts are on hand to answer your questions regarding the type of measurement technology that would best serve you.





HORIBA Particle Size Analysis Guidebook

HORIBA offers instruments for particle size, particle shape, zeta potential, molecular weight, and surface area analysis. A range of analytical techniques are employed including laser diffraction (Mie Theory), dynamic light scattering, nanoparticle tracking analysis (NTA) and dynamic and static image analysis (for determining both particle size and shape information).

These instruments can incorporate small volume pumping systems for precious materials, high throughput automation, dry powder dispersers, and temperature controlled flow systems in order to provide the user with the best possible solution with none of the trade-offs that might otherwise be necessary.

For more information on particle size theory and measuring techniques, visit: www.horiba.com/particle and download the Particle Size Analysis Guidebook



HORIBA's experienced staff of technical and applications specialists are 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 webinars, technical notes, and much more at www.horiba.com/particle
- Instant support via phone, e-mail, and online meeting
- On-site 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



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

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