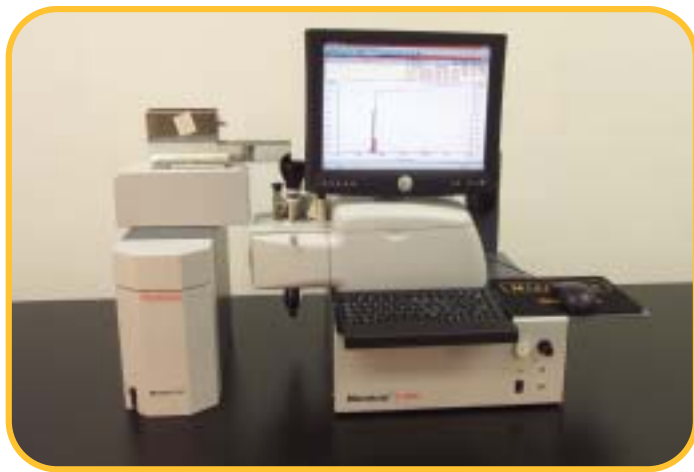


Microtrac S3500 Particle Size Analyzer

**S3500 Technology Improves
Accuracy and Consistency**



The Microtrac S3500 with Tri-laser Technology Increases Accuracy, Range, and Repeatability.

The Microtrac® S3500 employs the patented Tri-laser technology to provide accurate, reliable particle size information. Even in the submicron range, measurements are made without typical sample-to-sample variation evident in many other systems. By increasing the number of light sources, the unique Tri-laser technology makes more effective use of photo-detection devices, while maintaining maximum stability and alignment of the optical system. Microtrac S3500 complies with or exceeds ISO 13320-1 Particle size analysis- Laser diffraction methods.

The Microtrac S3500 offers these important benefits:

Alignment - Auto-alignment not routinely required

Accuracy - Mie scattering calculations for spherical particles and proprietary modified Mie calculations for non-spherical particles. Only Microtrac offers this enhanced accuracy for non-spherical particles - the majority of real-world materials.

Resolution - The unique Tri-laser, multi-detector optical system provides excellent resolution over the entire measuring range.

Consistency - Fixed detector and laser design delivers repeatability and linearity.

Range - Measurement capability from 0.024 to 2800 microns satisfies most applications.

Dry and Wet Options - Various delivery systems to choose from with conversion between wet and dry measurement in less than 2 minutes.

Security - Meets or exceeds 21 CFR Part 11 security requirements.

Flexibility - The modular design allows selectable configurations based on your application and can be expanded to meet future needs at any time.

Automation - Increased precision of sample preparation and operation through automated, multi-sample accessories.

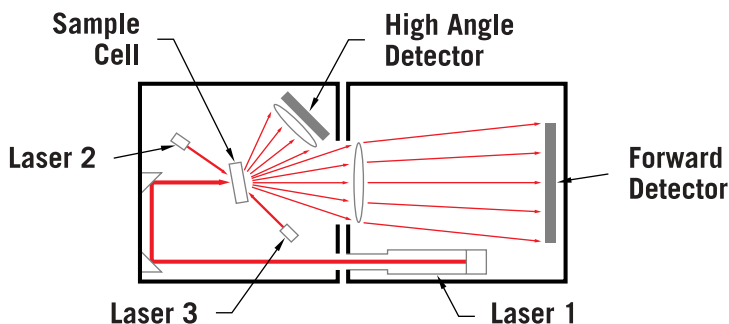
Detector Activity - Non-scanning, simultaneous parallel channel integration provides full, constant signal accumulation to permit maximized signal acquisition

Calibration - Internal auxiliary light source for testing and calibrating detector segments.

Validation - Full documentation and personal customer support

Another Simple Solution

Microtrac pioneered light-scattering technology in the early 70's. Since then, Microtrac has set the standard for particle size measurement by developing a full range of instruments that meets the needs of the industry, delivering unmatched accuracy, precision, and ease of use. The Automated Small Volume Recirculator (ASVR) can be combined with the MAC-26 Autosampler to improve the efficiency and precision of sample-handling operations. The innovative modular design allows the S3500 Microtrac system to be upgraded whenever measurement needs change.



Condensed Specifications

Precision:	Note: Precision pertaining to Microtrac instruments includes instrument-to-instrument agreement, sample-to-sample agreement, instrument internal repeatability, multiple operators, particle distribution breadth, particle size/shape, and preparation. As such the precision for an individual instrument or sample material may be better than the values provided. Spherical glass beads: $D_{50} = 642$ microns, Precision as CV = 0.7% Spherical glass beads: $D_{50} = 56$ microns, Precision as CV = 1.0% Spherical latex beads: $D_{50} = 0.4$ microns, Precision as CV = 0.6%
Measuring Range:	0.024 to 2800 microns
Optics:	Three fixed 780nm extremely long-life, solid-state lasers with computer controlled single lens alignment.
Measurement Angles:	0.02 - 163 degrees using 151 detector segments placed at correct angles for optimum scattered light detection.
Complete System:	Solid-state optical bench, Pentium computer, SVGA or Flat screen monitor, complete data-management software, printer options and sample delivery system.
Data Handling:	Volume, number and area distributions as well as percentile and other summary data. Data storage is in ODBC format to ensure compatibility with external statistical software applications. Data integrity may be ensured using FDA 21CFR Part 11 compliant security features, including password protection, electronic signatures and assignable permissions.
Software:	Windows 98, 2000, NT and XP operating systems.
Sample Handling:	Fluid delivery options include automated sample handling and sample changing using the MAC-26. Dry powder sample handling options include Vibratory (flowing) or Linear Feeder (non-flowing).
Maintenance:	When necessary, cell removal, cleaning and realignment within 3 minutes.
Solvents:	Compatible with any organic solvent.
Power Requirements:	90 to 240 VAC, 5 amp, 47/63 Hz, single phase.
Dimensions:	Height - 13 in. (33.0 cm), Width - 22 in. (55.9 cm), Depth - 12 in. (30.5 cm)
Typical Analysis time:	10 - 30 seconds
Delivery Systems:	ASVR - Automated Small Volume (200 ml) Recirculator VSR - Variable Speed Recirculator (manual operation) SVSC - Small Volume (7 ml) Sample Cell SDC - Sample Delivery Controller (fluid and dry sample delivery control) MAC-26 - Automatic carousel sample delivery station for fluid measurements Vibratory Dry Feeder - Flowable materials Linear Dry Feeder - Non-flowable materials

For complete information on the Microtrac S3500, as well as other Microtrac products, contact Microtrac Inc. or your local Microtrac representative.

Direct to Microtrac, Inc 727-507-9770. U.S. Sales ext 13, International Sales ext 12.

Visit the Microtrac World Wide Web site at www.microtrac.com
to learn more or to locate your local Microtrac sales representative.

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