



The NEXT STEP[®] in Dispersion Analysis
& Materials Testing



Multiwavelength Separation Analyser

LUMiReader[®] PSA

Going places the naked eye
never could.

Micro particle sizing | Separation | Stability | Density | Extinction

Benefits

- Immediately see and understand even complex dispersion behaviour
- Measure stability directly
- Reduce separation analysis time up to 10-fold
- Get velocity distribution even for fast-settling particles
- Obtain volume PSD without having to know refractive index
- Calculate density of your dispersed particles
- Investigate temperature effects up to 60 °C
- Differentiate between the various instability mechanisms
- Handle any dispersing media: water, oils, organic solvents
- Uses disposable cells, customizable
- Easy to use

Velocity Distribution $Q_v(v)$, $q_v(v)$

- Direct measurement no calibration / no material properties
- Always available - fast information for quality control
- Qualitative information about particle size and polydispersity

Extinction Weighted Particle Size Distribution $Q_{Int}(x)$, $q_{Int}(x)$

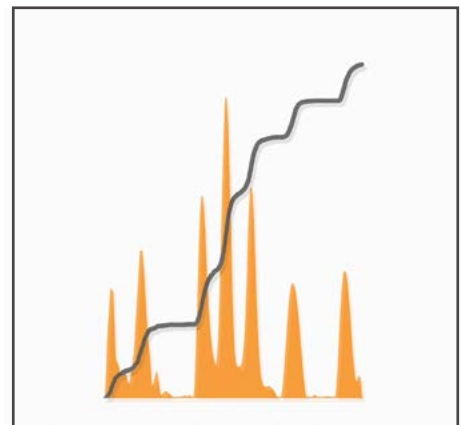
- Quantitative information about particle size distribution

Volume Weighted Particle Size Distribution $Q_3(x)$, $q_3(x)$

- Quantitative information about particle size and volume fraction of each class
- Conversion into mass or number distribution

Specifications

- Multiple light sources with different wavelengths
- Advanced optics, variable light intensity
- Temperature control from room temperature + 4K to 60° C
- Measuring time 1 sec - months
- Append measurement option for long-time monitoring
- Sample volume 0.5 ml - 4 ml (depending on cell type)
- Sample concentration 0.00015 Vol% - 75 Vol%
- Particle size: 500 nm - hundreds of μm
- PC controlled operation, USB interface
- Conformity: ISO/TR 13097; ISO 13317; ASTM D7827, CFR 21 Part 11



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Subject to change.