

Precise measurements to accelerate R&D and monitor quality



A complete solution to measure particle size distributions and monitor stability

...from nanometers to microns

- Easy to use, rapid measurements within 2 minutes
- Suitable for a wide range of concentrations without requiring dilution
- Obtain Intensity- and volume-weighted distributions of particle size
- Time dependent measurements to monitor dynamic processes e.g. aggregation
- Videos provide additional insight and traceability

Additional measurement modes available on discussion with Dyneval (bacterial contamination screen, low-volume viscometry, concentration).

Applications

- Advanced Therapeutics
- Formulations
- Process Analytics

Particle size

Consistency

Stability

Contamination



Parameters	<ul style="list-style-type: none"> • Intensity weighted size distribution – highlights large particles and aggregates. • Volume weighted size distribution – highlight dominant particle population. • Microscopy videos of sample – intuitive understanding and validation of measurement results.
Measurement principle	Statistical analysis of microscopy image intensity fluctuations from sub-visible and sub-micron particle motion over a range of length- and time-scales.
Validated size range	20 nm – 4 µm
Concentration range	10 - 10 ⁵ µg/mL (0.001 - 10% v/v, system dependent)
Sample volume	3-30 µL per channel (depending on slide used)
Sample holder	Disposable microfluidic chips (glass or plastic)
Measurement time	2 minutes per data point
Sample optical appearance	Clear ↔ Opaque (any colour)
Required sample information	Viscosity (for accurate sizing, diffusivity measured without)
Software	Dynescan desktop app (Windows compatible)
Power requirements	100–240 V AC, 50/60 Hz
Weight	3.2 kg
Dimensions	30 x 12.8 x 23.1 cm
Case dimensions	40.5 x 30.5 x 46 cm



Get in touch to find out more about Lumero® and how it can support your needs.

