

Nanosight LM10

Supported By: Malvern

Malvern Nanosight LM10

The Malvern NanoSight LM10 instrument provides an easy-to-use, reproducible platform for nanoparticle characterization. The LM10 allows rapid and accurate analysis of the size distribution and concentration of all types of nanoparticles from 10nm to 2000nm in diameter, depending on the instrument configuration and sample type.

The Malvern NanoSight LM10 uses the technology of Nanoparticle Tracking Analysis (NTA). This unique technology utilizes the properties of both light scattering and Brownian motion in order to obtain the size distribution and concentration measurement of particles in liquid suspension. A laser beam is passed through the sample chamber, and the particles in suspension in the path of this beam scatter light in such a manner that they can easily be visualized via a 20x magnification microscope onto which is mounted a camera. The camera operates at 30 frames per second (fps), capturing a video file of the particles moving under Brownian motion. The software tracks many particles individually and using the Stokes-Einstein equation calculates their hydrodynamic diameters.

Malvern Nanosight LM10 Advantages

- Simultaneous measurement of multiple characteristics saving time and sample volume.
- Visual validation of results gives extra confidence.
- User friendly software with easy set up of SOPs for routine use.
- Minimal sample preparation.
- Choice of standard or high sensitivity camera.
- Choice of sample chamber with or without temperature control.