

CHDF-3000

High Resolution Particle Size Distributions

The new **CHDF 3000** Offers:

The latest technology for High-Resolution Particle Size Distribution (PSD) measurement, including High Particle Detection Sensitivity, Dynamic Range, and Nanoparticle Optimized analysis.



True PSD Data through particle fractionation. No assumptions are needed regarding the shape of the Particle Size Distribution.



Accurate heterogeneous sample analysis –including Nanoparticles- thanks to its particle-density independent analysis.



Automated/Unattended operation. All components are controlled and operated by a simple single Windows User Interface.

High-Resolution Analysis for True Particle Size Distribution



Well suited to nano sized particle analysis

Sample volume of less than 1ml

High resolution capability of 10%

Matec Applied Sciences proudly brings you the new CHDF3000 with the latest advancements in High-Resolution particle size distribution (PSD) analysis. The CHDF3000 separates particles by size using the Capillary Hydrodynamic Fractionation (CHDF) technique. Light-Scattering based instruments provide mainly *mean* particle size data –any mean particle size can be produced by an infinite number of PSD's (see below). Instead, the CHDF3000 provides **complete, true, detailed** PSD data in the 5 nm to 3 μ m range. Some benefit highlights of the CHDF3000 are presented next.

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High Resolution Particle Size Distributions

These are some of the advances the CHDF3000 offers:

- ❖ Capillary Hydrodynamic Fractionation of particles for *true, detailed* PSD data. Broad and/or multi-modal PSD's are accurately reported.
- ❖ Wide dynamic range detection of minor particle populations in the presence of major ones.
- ❖ Highest reliability and easy operation in QC/R&D/online processes.
- ❖ Comprehensive Particle Size Distribution data reports.
- ❖ Continuous monitoring/control of all measurement data in tandem with the Pump, UV-Detector, and Auto-Sampler's own processors.
- ❖ Compact footprint for modern labs where space may be limited.
- ❖ Other features include: (i) automatic/unattended analysis via auto-sampler, (ii) high-resolution capability of 10%; (iii) particle-density independent suitable for heterogeneous-composition samples; (iv) sample volume less than 1 ml; (v) analysis time of 10 minutes irrespective of the sample's PSD as shown below.

