labodam

Laser Particle Size Analyzer

A1 Series

www.labodam.com // info@labodam.com

Laser Particle Size Analyzer

Laser particle size analyzer LLPA-A10

Laser particle size analyzer LLPA-A10 is a fully automatic cost effective and efficient particle size analyzer capable of measuring suspension, emulsion and powders. It uses laser diffraction measurement principle for measuring over the 0.1µm to 300µm particle size range for wet dispersion and is also well equipped with highly sensitive ring photoelectric detector which improves test accuracy.

Features

- Comprehensive laser diffraction particle size measurement principle
- Highly sensitive ring photoelectric detector which improves the test accuracy
- Fully automatic software control
- Capable of measuring suspensions, emulsions and powders
- Automatic optical bench alignment
- Built in dispersing unit consisting carefully aligned stirring set up, ultrasonic dispersing unit and the sample circulating pipes
- Built-in design effectively prevents the inhomogeneous dispersion and sedimentation of big particles
- Optional small capacity sample chamber which helps with measuring expensive/precious samples or samples difficult to be dispersed within the medium
- Analysis software uses an unique unconstrained data fitting technique developed to obtain data of unknown size distribution
- Manual and automatic mode of operation makes it user friendly

---

Applications

It finds wide application in cement industry, ceramics, environmental and soil applications, pharmaceutical industry. It is also used for measuring the particle size of food stuff as well as paints, pigments, coating, ink, toners, fillers etc.

Laser Particle Size Analyzer

Specifications

Model no.	LLPA-A10
Executive standard	ISO13320-1:1999
Principle	Laser light scattering
Analysis	Mie & Fraunhofer technique
Measuring range	0.1μm-300μm
Sample type	Suspension, emulsion, powders
Dispersion type	Wet
Test speed	< 2 min
Light source	High performance He-Ne Laser, 632.8 nm
Operation mode	Full automatic software control
Detector	Ring photoelectric detector
Detector channels no.	96 pcs.
Built-in ultrasonic function	Frequency: 40 kHz, Power: 35 W, Time: ≥ 1s
Agitator Revolutions Speed	0-300 rpm (Adjustable)
Circulate rated flow	8 l/min
Circulate rated power	10 W
Light path alignment system	Fully automatic
Accuracy	< 1%
Repeatability	< 1%
Sample tank volume	350 ml
Sample cuvette	10 ml (optional)
Software running	Win XP/Win7
Outer dimension (LxWxH)	880 × 390 × 460 mm
Net weight	44 kg

Laser Particle Size Analyzer

Laser particle size analyzer LLPA-A11

Laser particle size analyzer LLPA-A11 is fully automatic and intelligent particle size analyzer. It uses dual beam and multi-spectral detection system and laser diffraction measurement principle for measuring over the 0.01µm to 2000µm particle size range for wet dispersion and offers reliable and repeatable particle size analysis.

Features

- Converging fourier transform light path
- Dual-beam and multi-spectral detection system and side-light scatter test technology improves precision and performance of test
- Capable of measuring suspensions, emulsions and powders
- Expanded measurement range to 0.01µm, making it suitable for small samples
- Automatic optical bench alignment
- Ultrasonic dispersion, mechanical stirring and circulation channel reasonably integrated in the interior of the instrument
- Built-in dispersion system ensures uniform dispersion and distribution of particles in the testing process
- Intelligent automatic mode of operation reduces the testing workload and also eliminate the interference of human factors
- Requires calibration once in a year
- Quick and simple calibration method
- Unconstrained free fitting technique
- User friendly

Applications

It finds wide application in cement industry, ceramics, environmental and soil applications, pharmaceutical industry. It is also used for measuring the particle size of food stuff as well as paints, pigments, coating, ink, toners, fillers etc.

Laser Particle Size Analyzer

Specifications

Model no.	LLPA-A11
Executive standard	ISO13320-1:1999
Principle	Laser light scattering
Analysis	Mie & Fraunhofer scattering
Measuring range	0.01μm-2000μm
Sample type	Suspension, emulsion, powders
Dispersion type	Wet
Test speed	< 2 min
Light source	High performance He-Ne Laser, λ= 632.8nm
Operation mode	Fully automatic/ manual control
Detector channels no.	127 pcs.
Built-in ultrasonic function	Frequency: 40 kHz, Power: 35W, Time: ≥1s
Agitator Revolutions Speed	0-300 rpm (Adjustable)
Circulate rated flow	8 l/min
Circulate rated power	10 W
Light path alignment system	Fully automatic, Precision up to 0.1μm
Accuracy	< 1%
Repeatability	< 1%
Sample pool	350 ml
Sample cuvette	10 ml
Software running	Win XP/Win 7
Outer dimension (LxWxH)	1230 x 640 x 660 mm
Net weight	58 kg

Labodam Equipment Ltd

18a Melton Road Leicester LE4 5EA
United Kingdom
www.labodam.com // info@labodam.com