

labodam

Laser Particle Size ANALYZER



Laser particle size analyzer LLPA-A12 & LLPA-A13

Laser particle size analyzer LLPA-A12 & LLPA-A13 are fully automatic and intelligent particle size analyzer. It makes use of dual beam, stable converging fourier transform light path to determine the particle size distribution from 0.01 μm to 1000 μm . These particle size range is for wet dispersion and it offers reliable and repeatable particle size analysis. This particle size analyzer enables to understand the materials well such as adhesives, polymers, metal powders, minerals, pigments etc.

Features

- Wet sample dispersion system
- Stable converging fourier transform light path
- Orthogonal double laser beam technology
- High sensitivity photodetector to improves test accuracy
- Sample preparation system composed of automatic water supply, ultrasonic agitation , ultrasonic dispersion and circulation
- Manual & fully automatic modes of operation, easy to choose
- Fully automatic mode with one key test operation
- Automatic optical light calibration system
- High performance He-Ne Laser, $\lambda = 632.8\text{nm}$ as a light source
- Output parameters D50, D06, D75 D90 etc.
- Requires calibration once in a year
- Quick and simple calibration method
- Unconstrained free fitting technique
- User friendly

Applications

Laser particle size analyzer has applications in ceramic, cement industry, pharmaceutical industry & medicines, dyes and paints, pigments, fuel, chemicals, lubricants, lotions as well as food additives.

Laser particle size analyzer LLPA-A12 & LLPA-A13

Specifications

Model no.	LLPA-A12	LLPA-A13
Executive standard	ISO13320-1:1999	
Principle	Double laser light scattering	Single Laser light scattering
Analysis	Mie scattering & fourier transform light path	
Measuring range	0.01 μ m-780 μ m	0.1 μ m-1000 μ m
Sample type	Suspension, emulsion, powders	
Dispersion type	Built-in wet dispersion	
Test speed	< 2 min	
Light source	High performance He-Ne Laser, λ = 632.8 nm & semiconductor laser, λ = 650 nm	
Operation mode	Fully automatic or manual control, easy to choose	
Detector channels no.	76 pcs.	68 pcs
Built-in ultrasonic function	Frequency: 40 kHz, Power: 35W, Time: \geq 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 0.1 μ m	
Accuracy	< 1%	
Repeatability	< 1%	
Sample pool	350 ml	
Sample cuvette	10 ml	
Software running	Win XP/Win 7	
Outer dimension (LxWxH)	870x400x450 mm	
Net weight	37 kg	