



LASER PARTICLE SIZE ANALYZER LLPA-C10

Laser Particle Size Analyzer LLPA-C10 is a fully automatic unit integrated with wet and dry dispersion. With Laser diffraction principle and Mie and Fraunhofer scattering, features wet measuring range of 0.01 to 2000 μm and dry measuring range of 0.1 to 2000 μm . Designed with semiconductor lasers, log-spaced array detector and silicon photodetectors, offers full-automatic and manual operation mode with automatic optical path alignment system. Built-in sample dispersion system and unconstrained free fitting technology comprised software, provides high precision data with <2 min test time for wet dispersion and <1 min test time for dry dispersion. With different analysis mode, statistic method and comparison, it supports intelligent operation, user-defined analysis and test reports in various format.

Features

- ❑ A fully automatic unit integrated with wet and dry dispersion, convenient operation
- ❑ Laser diffraction principle and Mie and Fraunhofer scattering, rapid measurement
- ❑ Wet measuring range of 0.01 to 2000 μm and dry measuring range of 0.1 to 2000 μm
- ❑ Semiconductor lasers with log-spaced array detector and silicon photodetectors
- ❑ Full-automatic and manual operation mode with automatic optical path alignment system
- ❑ Built-in sample dispersion system, ensures sufficient dispersion and accurate result
- ❑ Unconstrained free fitting technology comprised software, offers high precision data
- ❑ <2 min test time for wet dispersion and <1 min test time for dry dispersion
- ❑ Different analysis mode, statistic method and comparison, meet different requirements
- ❑ Supports intelligent operation, user-defined analysis and test reports in various format
- ❑ Designed as per ISO 13320-1:2009 standard configurations
- ❑ High-efficient, stable and reliable unit for accurate and repeatable results

Application

Laser particle size analyzer is used to measure the sizes of particles in a material across cosmetics, food, coal, paint, paper, petrochemical, dyes, inks, explosives, , kaolin, medicine, metal powder, mica, milling, minerals, oxides industries etc.

Specifications

Model	LLPA-C10	
Dispersion Type	Wet and Dry	
Measurement Range	Wet: 0.01 to 2000 μm Dry: 0.1 to 2000 μm	
Photodetectors	Silicon photodetectors	
Channel number	Wet: 127 Dry: 100	
Accuracy Error	Wet and Dry: <1% (National Standard Sample D50)	
Repeatability Error	Wet and Dry: <1% (National Standard Sample D50)	
Light Source	High performance semiconductor laser ($\lambda = 632.8\text{nm}$ P >2.0 mW) Auxiliary blue semiconductor laser ($\lambda = 405\text{ nm}$, P >2.0 mW)	
Detector	Log-spaced array Test angle from 0.015 degree to 145 degree	
Wet Dispersion	Ultrasonic	Frequency:40 KHz Time: $\geq 1\text{ S}$ Power:60 W,
	Stir Revolution speed	0 to 300 rpm (Adjustable)
	Circulation	Rated Flow: 30 L/min Rated Power: 70 W
	Sample tank	1000 mL
Dry Dispersion	Dry-turbulence dispersion Normal shock wave shear technique	
Optical Path Alignment	Fully automatic	
Operation mode	Automatic/ Manual (Switchable)	
Standard	ISO 13320-1:2009	
Test Speed	Wet: <2 min Dry : <1min Typical measuring time: < 10s	
Software Running	WIN 7/10/XP, 64 bits	

Analysis mode	Free Distribution, R-R Distribution, Logarithm Normal Distribution, Mesh number classification etc.
Statistic Method	Volume Distribution, Quantity Distribution
Test Report	Word, Excel, Photo(Bmp), Text etc.
Intelligent operation	Intelligent SOP operation
Dimension (L×W×H)	1040×440×540 mm
Net Weight	70 kg

Optional Accessories

Accessories No.	Accessories Name
1	10 ml micro sample pool