LABTRON

Laser Particle Size Analyzer
LLPA-A1 Series

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Laser Particle Size Analyzer LLPA-A1 Series

Laser Particle Size Analyzer LLPA-A10

Laser Particle Size Analyzer LLPA-A10 is an intelligent wet laser particle size analyzer, adopted with MIE scattering principle, high-sensitive ring photoelectric detector, and unconstrained free fitting software technology. Designed as per ISO13320-1:1999 standard configurations, offers 0.1 to 300 µm of measuring range with 39 channels and 350 ml sample pool. Equipped with high-performance semiconductor laser and built-in dispersion unit, features auto optical alignment, auto water supply, auto drainage, auto bubble removing, auto ultrasonic dispersion etc. through one-key operation. Incorporated with intelligent SOP operation, automatic and manual mode, has different analysis mode, statistic methods, and statistic comparisons, offers <2 min test time and supports test report in various format.

Laser Particle Size Analyzer LLPA-A11

Laser Particle Size Analyzer LLPA-A11 is a fully automatic wet laser particle size analyzer, adopted with MIE scattering principle, dual-beam and multiple spectral detection systems, side light scatter test technology, and unconstrained free fitting software technology. Designed as per ISO13320-1:1999 standard configurations, offers 0.01 to 2000 µm of measuring range with 127 channels and 350 ml sample pool. Equipped with high-performance semiconductor laser and built-in dispersion unit, features auto optical alignment, auto water supply, auto drainage, auto bubble removing, auto ultrasonic dispersion etc. Incorporated with intelligent SOP operation, automatic and manual mode, has different analysis mode, statistic methods, and statistic comparisons, offers <2 min test time and supports test report in various format.

Laser Particle Size Analyzer LLPA-A12

Laser Particle Size Analyzer LLPA-A12 is an intelligent and fully automatic wet laser particle size analyzer, adopted with MIE scattering principle, high-sensitive ring-shaped multi-element silicon photo-diode detector, and unconstrained free fitting software technology. Designed as per ISO13320-1:1999 standard configurations, offers 0.01 to 1000 µm of measuring range with 90 channels and 350 ml sample pool. Equipped with high-performance semiconductor laser and builtin dispersion unit, features auto optical alignment, auto water supply, auto drainage, auto bubble removing, auto ultrasonic dispersion etc. through one-key operation. Incorporated with intelligent SOP operation, automatic and manual mode, has different analysis mode, statistic methods, and statistic comparisons, offers <2 min test time and supports test report in various format.

Laser Particle Size Analyzer LLPA-A1 Series

Laser Particle Size Analyzer LLPA-A13

Laser Particle Size Analyzer LLPA-A13 is an intelligent and fully automatic wet laser particle size analyzer, adopted with MIE scattering principle, high-sensitive ring-shaped multi-element silicon photo-diode detector, and unconstrained free fitting software technology. Designed as per ISO13320-1:1999 standard configurations, offers 0.1 to 1000 µm of measuring range with 87 channels and 350 ml sample pool. Equipped with high-performance semiconductor laser and built-in dispersion unit, features auto optical alignment, auto water supply, auto drainage, auto bubble removing, auto ultrasonic dispersion etc. through one-key operation. Incorporated with intelligent SOP operation, automatic and manual mode, has different analysis mode, statistic methods, and statistic comparisons, offers <2 min test time and supports test report in various format.

Features

- An intelligent and fully automatic wet laser particle size analyzers
- Adopted with MIE scattering principle, highly sensitive detectors and detection system
- Unconstrained free fitting software technology, facilitate the data processing
- Designed as per ISO13320-1:1999 standard configurations
- Different measuring range with different channels and 350 ml sample pool
- High-performance semiconductor laser and built-in dispersion unit
- Auto optical alignment, auto water supply, auto drainage, auto bubble removing, auto ultrasonic dispersion etc.
- Intelligent SOP operation with both automatic and manual operation mode
- Different analysis mode, statistic methods, and statistic comparisons
- <2 min test time with test report in various format for easy data analysis
- High-efficient, stable and reliable unit to precisely determine the particle size distribution

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 (LLPA-A10 and LLPA-A11)

Model	LLPA-A10			LLPA-A11
Dispersion Type	Wet			Wet
Measurement Range	0.1 to 300 μm			0.01 to 2000 μm
Channel number	39			127
Accuracy Error	<1% (National Standard Sample D50)			
Repeatability Error	<1% (National Standard Sample D50)			
Light Source	High performance semiconductor laser λ = 632.8 nm, P > 2 mW, Service life > 25000 hours			
Detector	High-sensitive ring photoelectric detector			Dual-beam and multiple spectral detection
Dispersion Method	Ultrasonic	Frequency	40 kHz	
		Power	100 W	35 W
		Time	Adjustable	≥1 S
	Stir Revolution Speed	100 to 3950 rpm (adjustable)		0 to 3000 rpm (adjustable)
	Circulation	Rated Flow: 0 to 10 L/min		Rated Flow: 8 L/min
		Rated Power: 25 W		Rated Power: 10 W
Sample Pool Capacity	350 ml			
Optical Path Alignment	Fully automatic			
Operation mode	Automatic/ Manual (Switchable)			
Standard	ISO 13320-1:2009			
Test Speed	<2 min/time			
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)	880×390×460 mm	660×320×400 mm
Net Weight	41 kg	65 kg

Specifications (LLPA-A12 and LLPA-A13)

Model	LLPA-A12		LLPA-A13
Dispersion Type	Wet		Wet
Measurement Range	0.1 to 1000 μm		0.01 to 2000 μm
Channel number	90		87
Accuracy Error	<1% (National Standard Sample D50)		
Repeatability Error	<1% (National Standard Sample D50)		
Light Source	High performance semiconductor laser λ = 632.8 nm, P > 2 mW, Service life > 25000 hours		
Detector	High-sensitive ring-shaped multi-element silicon photo-diode detector		
Dispersion Method	Ultrasonic	Frequency	40 kHz
		Power	35 W
		Time	≥1 S
	Stir Revolution Speed	0 to 3000 rpm (adjustable)	
	Circulation	Rated Flow: 8 L/min	
		Rated Power: 10 W	
Sample Pool Capacity	350 ml		
Optical Path Alignment	Fully automatic		

Operation mode	Automatic/ Manual (Switchable)
Standard	ISO 13320-1:2009
Test Speed	<2 min/time
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)	850×390×450 mm
Net Weight	41 kg

Optional Accessories

Accessories No.	Accessories Name
1	10ml micro sample pool