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# **PARTICLE SIZE ANALYZER**









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## Laser Particle Size Analyzer

#### **PSA-N802**

### Advantages

#### **High-Quality Construction**

- Dynamic light scattering principle & photon correlation spectrum technology
- PCR technology
- CR256 digital correlation

#### Quiet Operation

Imported HAMAMATSU photomultiplier provides high sensitivity

#### Guaranteed Accuracy and Precision

- High noise-signal ratio.
- High speed data collection and calculation
- High stable optical path system
- High precision constant temperature control system

#### Advanced test principle, technology & detector design

- High-quality data collection and calculation
- Well-designed stable optical path system

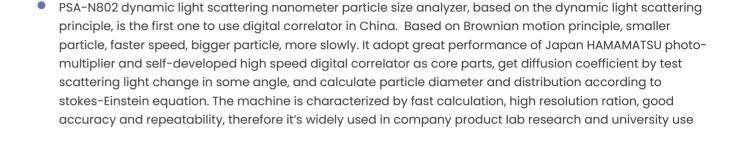






## Size Analyzer

- Advanced test principle &technology
- High resolution with 8ns resolution speed.
- Advanced Detector Design improves measurement speed and accuracy
- Efficient data collection and calculation
- Well-designed stable optical path system



## **Specifications**

Model		PSA-N802	
Standard		GB/T 19627-2005/ISO 13321:1996	
		GB/T 29022-2012/ISO 22412:2008	
Measure ro	ange	lnm-10000nm	
Concentra	tion range	0.lmg/ml⊠100mg/ml	
Accuracy 6	error	<1%( D50 of National standard sample)	
Repeatabil	lity error	<1% ( D50 of National standard sample)	
Light sourc	e	Semiconductor laser λ= 532nm P=30mW	
Detector		Imported HAMAMATSU photo-multiplier	
Scattering angle		900	
Sample cuvette		1-4mL	
Temperatu	ure control	5-40 °C temperature controller within 0.1	
Test Measu	urment Time	<5 Min	
Outer Dime	ensions(L*W*H)	48×27×17cm	
G.W.		12Kg	
Operation	system	Win 7/Win 10 64 bits	
Analysis		Average particle diameter, particle distribution,	
Aridiysis		photon counting rate etc.	
	Model	CR256	
Digital	Auto-correlation channels	256	
Correlato	Baseline channel	4	
	Unit delay time	100ns-10ms	

# **Dry Dispersion Laser Particle Size Analyzer**

#### PSA-LD3003A



### **Advantages**

#### Automatic&User-friendly operation

 Advanced Detector Design improves measurement limit&resolution

#### Good dispersion structure

 Scientific and automatic dry dispersing system extends lifespan

#### Perfect accuracy and precision guaranteed

- Advanced Detector Design enhances the accuracy and stability of test results
- Instrument Software provides high precision of testing result

#### **Technical Parameters**

- PSA-LD3003 is a universal dry dispersion laser particle size analyzer is designed to have the scientific structure design and a new generation of dispersion device, making the dispersion effect is better than similar instruments.
- This equipment uses MIE scattering theory as the theoretical basis, converging Fourier transform optical path, and with high stability and He-Ne laser high-sensitivity photodetectors ring ensures repeatability and accuracy of test results.
- This product uses air as the dispersing medium, with turbulent dispersion principle, high-precision feeding apparatus, Patent powder injection pumps and No-Oil silent air source to ensure that the sample is thoroughly dispersed.
- It is applied to any powder material, particularly good for materials occurs chemical reaction in water, or shape change in the liquid. It has same accuracy and repeatability compared with the wet method.

### **Specifications**

Model		PSA-LD3003A	
Size Range		0.1µm-300µm	
Standard		ISO13320-1:1999, GB/T19077.1-2008, Q/0100JWN001-2013	
Channels	Number	40 pcs	
Accuracy	error	<1% (Deviation of D50 on national standard sample)	
Repeatab	ility error	<1% (Deviation of D50 on national standard sample )	
Light Sour	ces	He-Ne laser ( $\lambda$ = 632.8nm, P>2.0MW)	
Dispersion	n Method	Dry-turbulence dispersion mode	
Operation	Mode	Manual/Automatic	
Optical Pa	th Calibration System	Automatic	
Dispersing	g Medium	Compressed air	
Measurme	ent Time	<1min	
Operation	System	Win 7	
Interface		USB	
	Analysis mode	Free Distribution, R-R Distribution, Logarithm Normal Distri-	
	Analysis mode	bution, Mesh number classification	
	Statistic Method	Volume Distribution, Quantity Distribution	
		Several Testing Results of samples	
	Statistic Comparison	Different batches of samples testing result,	
	statistic companson	Samples before and after processing,	
		Test result of samples in different time.	
Software	User-defined Analysis	Figure out percentage according to the particle size	
function		Figure out particle size according to the percentage	
		Figure out percentage according to the particle size range	
		Meet demands of representation of particle test in different	
		industries.	
	Test Report	Word, Excel,Photo(Bmp), Text etc	
	Multi-language Support	Chinese&English	
	Intelligent Operation Mode	Automatically control Air flow speed, dispersion,test and	
	intelligent operation wode	analysis.Better Repeatability after remove human-factor	
Dimensions (L*W*H)		88×40×30cm	
Net Weight		36Kg	

# **Spray Laser Particle Size Analyzer**

#### PSA-LS311XP

### Description

- PSA-LS311XP desktop spray laser particle size analyzer is designed and developed specially for the droplet particle size distribution test of small spray equipment.
- It integrates a number of patent technologies including lens protection devices.
- It can measure droplets particles in the air without touch.











It's mainly applied to medical atomizer, atomization medicine, various aerosol, spray and other small spray equipment, especially suitable for the national pharmacopoeia for inhalation aerosol, spray, powder mist and other particle size testing requirements.

#### **Features**

- Highly improved resolution
- ♦ A patented technique of Fourier transform .
- ♦ The measurement limit and resolution of the instrument are improved.
- Protective air flow protection device
- ◆ Lens are effectively protected to avoid droplet pollution of the lens in the testing process.

## **Specifications**

Model	PSA-LS311XP
Execute Standard	ISO13320:2009, GB/T19077-2016,Q/0100JWN001-2013
Size Range	0.1-100µm
Detector Channels Number	40 PCS
Accuracy error	<1% (CRM D50)
Repeatability error	<1% (CRM D50)
Light source	Semiconductor λ= 650nm p>1mw
Feeding	open
Measurement area length	6cm
Dimensions(L*W*H)	66×26×45cm
N.W.	19Kg

#### PSA-LA2800A

### Description

 PSA-LA2800A full automatic wet laser particle size analyzer adopt MIE scattering principle, with measure size from 0.01µm to 2000 µm, which offers reliable and repeatable particle size analysis for a diverse range of applications. It use dual-beam& multiple spectral detection systems and side light scatter test technology to significantly improve precision and performance of test, on behalf of the domestic advanced level in the field.



## **Specifications**

Model	PSA-LA2800A	
Standard	ISO13320-1:1999, GB/T19077.1-2008, Q/JWN001-2009	
Measurmentt Principle	MIE scattering principle	
Measurment Range	0.01µm-2000µm	
Channels Number	127	
Accuracy error	<1% (Deviation of D50 on national standard sample)	
Repeatability error	<1% (Deviation of D50 on national standard sample )	
ight courses	High performance He-Ne Laser (λ= 632.8nm, P>2MW)	
ight sources	Lifetime>25000hours	
Iltrasonic	Frequency:40KHz Power:35W, Time: ≥1S ,Anti-dry function	
Sample Pool	Volume:350mL	
licro-Sample Pool	Volume: 10mL ( Available)	
Operation Mode	Full automatic/ manual control, freely choose	
Resolution	Free distribution truly reflect particle size distribution	
Optical bench alignment system	Japan Canon lens, Full automatic, precision is up to 0.1um	
Measurment Time	<2min	
Outer dimension (L*W*H)	66×32×40cm	
let weight	65Kg	

### Description

- Advanced Detector Design improves measurement limit,range&resolution.
- Full automatic built-in wet dispersion system
- Perfect accuracy and precision guaranteed
- Automatic&User-friendly one-key operation
- Time-saving and easier calibration method

#### **Features**

• Automatic&User-friendly one-key operation

Intelligent Operation mode

All processes including water-supply, dispersion, circulation, testing, cleaning, data record, data analysis, save and print are completed automatically

Quicker and preciser measurements

Measurement range is expanded to 0.01um.

Advanced Detector Design enhances the accuracy and stability of test results

Simplified calibration process

Only once a year

• Time-saving dispersion

Full automatic built-in wet dispersion system

	Model	PSA-LA2800A
Dispersion	Stir	Revolutions Speed: 0-300RPM (Adjustable)
Method	Circulate	Rated Flow:8L/min Rated Power:10W
	Anglysis made	Free Distribution, R-R Distribution, Logarithm Normal Distribu-
	Analysis mode	tion, Mesh number classification etc.
	Statistic Method	Volume Distribution, Quantity Distribution
		Several Testing Results of samples
	Statistic Comparison	Different batches of samples testing result,
Software	Statistic Comparison	Samples before and after processing,
function		Test result of samples in different time.
		Figure out percentage according to the particle size
	User-defined Analysis	Figure out particle size according to the percentage
		Figure out percentage according to the particle size range
		Meet demands of representation of particle test in different
		industries
	Test Report	Word, Excel,Photo(Bmp), Text etc
	Multiple-language Support	Multiple language Support
	Intelligent operation	Automatically control water inflow, dispersion,test and analy-
	intelligent operation	sis.Better Repeatability after remove human-factor

## **Wet Laser Particle Size Analyzer**

#### **PSA-L2000**

### Description

- As high efficient-cost model, PSA-L2000 laser particle size analyzer with wet dispersion is most economical and popular since launched.
- After more than ten years of tests and numerous technical improvements, the structure and software are very mature and perform stably, meeting industrial testing general requirements.



#### **Features**



High efficient-cost model, semi automatic operation.



Full built-in integrated dispersion system



Perfect accuracy and precision guaranteed



Advanced Detector Design improves testing efficiency&resolution

### Advantages

• Semi-automatic&User-friendly one-key operation

Water inflow, dispersion,test and analysis are controlled automatically. Multi-language Support, Chinese&English (Others are available)

Perfect accuracy and precision guaranteed

Excellent data processing ensures test result accuracy in different situations User-defined Analysis

Unique unconstrained free fitting technology, make particle analysis not restricted by any function, truly reflect particles distribution, ensure the good accuracy.

Advanced Detector Design improves measurement limit&resolution.
 Converging light Fourier transform light path, efficiently improve resolution ratio of sub-micron particles.

## **Specifications**

Model		PSA-L2000	
Standard		ISO13320-1:1999, GB/T19077.1-2008, Q/JWN001-2009	
Measurment	Range	0.lµm-300µm	
Channels Nu	mber	39	
Accuracy err	or	<1% (National Standard Sample D50 )	
Repeatability	/ error	<1% (National Standard Sample D50 )	
Light sources	3	High performance He-Ne Laser (λ= 632.8nm, P>2MW,Life >25000hour)	
	Ultrasonic	Frequency:40KHz Power:35W, Time: ≥1S	
	Stir	Revolutions Speed: 0-300RPM (Adjustable)	
Dispersion	Circulate	Rated Flow:8L/min Rated Power:10W	
Method	Sample Pool	Volume:350mL	
	Micro Sample Pool	Volume: 10mL ( Optional)	
Operation Mo	ode	Display control+computer analysis	
Optical Calibration System		Manual	
Measurment Time		<2min	
Dimensions(L*W*H)		66×32×40cm	
Net Weight		25Kg	

#### PSA-LA2500B

## Description

- Advanced Detector Design improves measurement limit&resolution
- Full built-in sampling system
- Perfect accuracy and precision guaranteed
- Micro sample chamber
- Automatic&User-friendly one-key operation









## **Specifications**

Model	PSA-LA2500B	
Standard	ISO13320-1:1999, GB/T19077.1-2008, Q/0100JWN001-2013	
Measurment Principle	MIE Scattering Principle	
Measurment range	0.01µm-780µm	
Photodetectos	90 PCS	
Accuracy error	<1% (Deviation of D50 on national standard sample)	
Light Courses	High performance He-Ne Laser λ= 632.8nm, p>2mW	
Light Sources	Service time>25000 hour	
Operation mode	Manual and Full automatic	
Optical alignment system	Full automatic optical path alignment system	
Measurment Time	<2min (including all the procedures) fastest measuring	
Wedsuffield fifte	time<10S	
Running temperature	15 ℃ -35 ℃	
Outer dimension(L*W*H)	85×39×45cm	
Net weight	40Kg	

### Description

• PSA-LA2500B intelligent full automatic laser diffraction particle size analyzer with principle of Mie Scattering can precisely determine the particle size distribution from 0.µm1 to 1000µm.It enables you understand materials well, such as abrasives, adhesives, agrochemical,barite, Batteries, Bentonite, Boron Carbide, Brucite, Bubble, Calcite, Calcium Carbonate, Carbon Black, Catalysts, Cement, Ceramics, Chemicals, Clay, Coal, Coatings, Corundum, Cosmetics, Diamond Powder, Dolomite, Diatomite, Emulsion, Environmental, Explosives, Ferrite, Flour, Fluorescent, Fluorite, Food & Beverage, Food Additive,-Graphite, Grinding, Inks, Kaolin, Medicine, Metal Powder, Mica, Milling, Minerals, Oxides, Paints, Paper, Petrochemical, Pharmaceuticals, Pigments, Plaster, Plastics, Polymers,Quartz,Refractory, Resins, Silica, slurry, Soil Sediments, Starch, Sulfur, Synthetics, Talc, Toners, Tourmaline, Wollastonite, Zeolite, Zirconium Silicate etc etc .

#### **Features**

- Highly improved resolution
   A patented technique of Fourier transform .
- Time-saving dispersion
   Built-in dispersion units
   Homogeneous dispersion and sedimentation of big particles
- Unconstrained fitting techniques: real particle size distribution
- Micro sample chamber (optional):
   10ml capacity of the sample chamber
- Automatic&User-friendly one-key operation
   Intelligent SOP Operation

   Two options including manual and automatic modes
   Perform test, alignment, water supply, drainage,
   bubble removing, ultrasonic dispersion, cleaning etc.
   automatically
- Quicker and preciser measurements
   Fully Automatic Laser Alignment
   Preciser data analysis

	Model	PSA-LA2500B	
Wet	Ultrasonic	Frequency:40KHz Power:35W, Time: ≥1S	
	Agitator	Revolutions Speed: 0-3000RPM (Adjustable)	
dispersion	Circulation	Rated Flow:8L/min Rated Power:10W	
	Sample tank	Volume: 350mL	
	Anglysis made	Free Distribution, R-R Distribution, Logarithm Normal Distribution, Mesh	
	Analysis mode	number classification etc.	
	Statistic Method	Volume Distribution, Quantity Distribution	
	Statistic Comparison	Several Testing Results of samples	
		Different batches of samples testing result,	
		Samples before and after processing,	
Software		Test result of samples in different time.	
function	User-defined Analysis	Figure out percentage according to the particle size	
		Figure out particle size according to the percentage	
		Figure out percentage according to the particle size range	
		Meet demands of representation of particle test in different industries	
	Test Report	Word, Excel,Photo(Bmp), Text etc	
	Multiple-language Support	Multiple language Support	
	Intelligent energtion	Automatically control water inflow, dispersion,test and analysis.Better	
	Intelligent operation	Repeatability after remove human-factor	

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# Intelligent Laser Particle Size Analyzer

#### PSA-SI319A





Exclusive patent technology



Protective airflow device



Versatile structure design



Efficient optical path alignment system



Multiple size distribution model

#### **Features**

#### **Exclusive patent technology**

- Parallel optical testing technology
- Spectrum amplification technique
- Auxiliary integration photoelectric detector
- Unique Airflow Protection Device Len&User-friendly device
- airflow protection device
- Split-Type Structure Design
   Advanced system and model
- Table automatic optical path alignment system
- Multiple size distribution model

### Description

PSA-SI319 is a specially designed and developed bench-top spray laser particle size analyzer for droplet size test. This instrument adopts Fraunhofer diffraction principle and parallel light path design with high-performance and high-power laser, lifetime>25000hours, which can meet the requirements of droplet test, with its range can be adjusted according to the customers' requirement.

## **Specifications**

Model	PSA-SI319A
Executive Standard	ISO13320-1: 1999, GB/T19077.1-2008, Q/0100JWN001-2013
Principle	Fraunhofer diffraction principle
Instrument Structure	Split-Type
Testing Range	1μm-500μm
Number of Channels	50 pcs
Accuracy error	<1% (Reference to CRM D50)
Repeatability error	<1% (Reference to CRM D50)
Reproducibility between instruments	<1% (Reference to CRM D50)
Data Acquisition Rate	≥2KHZ
Laser	LD Pump Laser; $\lambda$ =532nm, p>40mw, life time>25000 hour
Laser safety	Class 3B
Air purging system	Equipped with airflow protection device, which can effectively protect the lens and avoid droplet pollution to lens in testing process.
Sampling Mode	Open Style
Optical alignment system	Automatic
Working temperature	10-40°C
Environment humidity	≤75%
Operation platform	Common model, Windows 7/8/10 (64 bits) need install Office 2003
Output parameters	Particle volume distribution curve, D10-D100 any parameters
Testing Area Length	0.1-10m/adjustable
Lens Protection	Double gas episodic
Outor Disconsion	Transmit port: L369*W295*H360mm Receive
Outer Dimension	port:L858*W295*H360mm
Electricity	220V, 50Hz
Weight	68Kg

# Intelligent Laser Particle Size Analyzer

#### PSA-LD3008B







- Advanced Detector Design improves measurement limit&resolution.
- Perfect accuracy and precision guaranteed
- Both manual and fully automatic modes are supported
- Particle distribution, cumulative value curve and typical particle sizes (D10, D50, D90.) user-defined analyze result are provided.
- Flexible test report output and display forms

## Advantages

Highly improved resolution

A patented technique of Fourier transform High precision-automatic optical path calibration system

Human-based operation mode

Manual and Full automatic, easy to choose.

Multiple results

Extended lifespan

Wearable ceramics improve dispersion system's working life.

## Description

• PSA-LD3008 is intelligent dry laser particle size analyzer, supporting both manual and full automatic operation modes. Based on MIE scattering principle, Converging light Fourier transform light path, Highly stable He-Ne laser and High sensitive ring photoelectric detector, it guarantees good repeatability and accuracy. It uses air as dispersion medium, and use turbulent dispersion principle with High precision feeding device, patent powder spray pump and oil-free silent gas source to guarantee the samples to be fully dispersed. It's fit for any dry powder materials, especially the powder that takes chemical reaction with water or changes its shape in liquid. It has same accuracy and repeatability compared to the wet laser particle size analyzer.

## **Specifications**

Model	PSA-LD3008B	
Standard	ISO 13320-1:1999; GB/T19077.1-2308; Q/0100JWN001-2013	
MeasurmentPrinciple	MIE Scattering Principle	
Measurment Range	0.1μm -1200μm	
Detector Channels Number	80 PCS	
Accuracy error	<1% (Deviation of D50 on national standard sample)	
Repeatability error	<1% (Deviation of D50 on national standard sample )	
Light sources	He-Ne laser (λ= 632.8nm, P>2.0MW Service time>25000hour)	
Dispersion	Dry-turbulence dispersion mode, normal shock wave shear technique	
Operation Mode	Manual & Full automatic	
Feeding	Automatic vibration feeding	
Optical Calibration System	Automatic	
Measurment Time	<li>Imin</li>	
Power supply	220V	
Dimensions(L*W*H)	105×44×54cm	
Net Weight 58Kg		

	Model	PSA-LD3008B
	Analysis mode	Free Distribution, R-R Distribution, Logarithm Normal Distribution, Mesh
		number classification etc.
	Statistic Method	Volume Distribution, Quantity Distribution
	Statistic Comparison	Several Testing Results of samples
		Different batches of samples testing result,
		Samples before and after processing,
Software		Test result of samples in different time.
function	User-defined Analysis	Figure out percentage according to the particle size
		Figure out particle size according to the percentage
		Figure out percentage according to the particle size range
		Meet demands of representation of particle test in different industries
	Test Report	Word, Excel,Photo(Bmp), Text etc
	Multiple language Support	Multiple language Support
	Intelligent operation	Better Repeatability after remove human-factor

#### **PSA-2L2308A**





Wet& dry sample dispersion system design



Automatic&User-friendly one-key operation Full built-in sampling system



Perfect accuracy and precision guaranteed

#### **Features**

Automatic&User-friendly one-key operation

Wet and dry sample dispersion system Integrated Design.
Automatic&manual operation mode are designed to freely choose.
realize one key to switch

Good dispersion structure

Full built-in Sample dispersion system ensures precise test result.

Perfect accuracy and precision guaranteed

Advanced Detector Design enhances the accuracy and stability of test results Instrument Software provides high precision data with 10Khz data acquisition time.



PSA-2L2308A intelligent full automatic wet&dry laser particle size analyzer adopts laser diffraction theory(Mie and Fraunhofer diffraction), with its measure size from 0.01µm to 2000µm(dry 0.1µm-2000µm) that offers reliable and repeatable particle size analysis for a diverse range of applications. It uses dual-beam& multiple spectral detection systems and side light scatter test technology to significantly improve precision and performance of test. It's a prior choice for industrial production quality control departments and research institutions.

## **Specifications**

	Model	PSA-2L2308A
	Ultrasonic	Frequency:40KHz Power:60W, Time: ≥1S
	Stir	Revolutions Speed: 0-3000RPM (Adjustable)
Wet dispersion	Circulate	Rated Flow:30L/min Rated Power:70W
Tree dispersion	Sample tank	Volume:1000mL
	Micro-	V.I. 40 1/A 3111
	Sample cuvette	Volume: 10mL ( Available)

модель	PSA-2L2308A	
Measurment Standard	ISO 13320-1:2009,GB/T19007-2016,Q/0100JWN001-2013	
	Compliance with 21 CFR Part 11	
Measurment Principle	Laser diffraction principle	
Analysis	Mie and Fraunhofer scattering	
Detector Arrangement	Log-spaced array, test angle from 0.015 degree to 145 degree	
Measurment Range	Wet:0.01μm-2000 μm Dry: 0.1μm-2000μm	
Silicon Photodetectors	Wet:127PCS Dry:100 PCS	
Accuracy error	Wet<1% Dry<1% (CRM D50)	
Repeatability error	Wet<1% Dry<1% (CRM D50)	
Light sourceS	Dual lens, He-Ne laser P>3.0 MW (λ= 632.8nm)	
	Auxiliary green semiconductor laser (λ= 405 nm) P>2.0MW ,	
Laser Safety	Class 1	
Dry dispersion	Dry-turbulence dispersion patent, normal shock wave shear technique	
Feeding Speed	Adjustable (Variable speed knob)	
Operation Mode	Full automatic / manual control, freely choose	
Dispersion medium	Compressed Air, pressure: 0 to 6 bar	
Optical bench alignment system	Full automatic, precision is up to 0.2um	
Measurment Time	Wet: <2 Min Dry: <1min Typical measuring time<10S	
Outer dimension(L*W*H)	104×44×54cm	
Net Weight	70Kg	

#### PSA-LA2000

## Description

- Advanced Detector Design improves measurement limit&resolution
- Full built-in sampling system
- Perfect accuracy and precision guaranteed
- Micro sample chamber
- Automatic&User-friendly one-key operation









## **Specifications**

Model	PSA-LA2000	
Standard	ISO13320-1:1999, GB/T19077.1-2008, Q/JWN001-2009	
Measurment Principle	MIE scattering principle	
Measuring Range	0.1µm-300µm	
Channels Number	39 PCS	
Accuracy error	<1% ( CRM D50 )	
Repeatability error	<1% (CRM D50)	
Light sources	High performance He-Ne Laser (λ= 632.8nm, P>2MW)	
	Lifetime>25000hour	
Operation Mode	Full automatic and manual control, freely choose	
Output parameter	D10,D50,D90,D100,S/V referent parameters	
Optical Calibration System	Full automatic	
Measurment Time	<2mins	
Dimensions(L*W*H)	88×39×46cm	
Net Weight	41Kg	

#### **Features**

Highly improved resolutio

A patented technique of Fourier transform.

Time-saving dispersion

Built-in dispersion units

Homogeneous dispersion and sedimentation of big particles

Unconstrained fitting techniques:

real particle size distribution

Micro sample chamber (optional):

10ml capacity of the sample chamber

Automatic&User-friendly one-key operation

Intelligent SOP Operation

Two options including manual and automatic modes

Perform test, alignment, water supply, drainage, bubble removing, ultrasonic dispersion, cleaning etc. automatically

• Quicker and preciser measurements

Fully Automatic Laser Alignment

The full process < 2 minutes.

## Description

PSA-LA2000 intelligent laser particle size analyzer is mainly used for performing tests, alignment,water supply,drainage,bubble removing, ultrasonic dispersion, cleaning etc.automatically, really realizing one-key operation. It is designed to adopt :full built-in sampling system,Original designed unconstrained free fitting software technology, ensures good accuracy with comprehensive Laser diffraction particle size measurement principle. This equipment especially suits the laboratories of enterprises, colleges and universities and research institutes to use.

	Model	PSA-LA2000	
Dispersion Method	Ultrasonic	Frequency:40KHz Power:50W, Time: ≥1S	
	Stir	Revolutions Speed: 0-3000RPM (Adjustable)	
	Circulate	Rated Flow:8L/min Rated Power:10W	
	Sample Pool	Volume:350mL	
	Micro- Sample Pool	Volume: 10mL ( Available)	

#### PSA-LA2800B

### Description

- Advanced Detector Design improves measurement limit,range&resolution.
- Full automatic built-in wet dispersion system
- Perfect accuracy and precision guaranteed
- Automatic&User-friendly one-key operation
- Time-saving and easier calibration method



## **Specifications**

Model	PSA-LA2800B	
Standard	ISO13320-1:1999, GB/T19077.1-2008, Q/JWN001-2009	
Measurment Principle	MIE scattering principle	
Measurment Range	0.01µm-1200µm	
Photo detectors	127 PCS	
Accuracy error	<1% (Deviation of D50 on national standard sample)	
Repeatability error <1% (Deviation of D50 on national standard sample )		
Light courses	High performance He-Ne Laser (λ= 632.8nm, P>2MW)	
Light sources	Semiconductor laser (λ= 650nm, P≥3MW)	
Operation Mode	Full automatic/ manual control, freely choose	
Resolution	Free distribution truly reflect particle size distribution	
Optical bench alignment system	Full automatic,precision is up to 0.1um	
Measurment Time	<2mins fastest measuring time<10S	
Outer dimension(L*W*H)	66×32×40cm	
Net weight	65Kg	

## Description

PSA-LA2800B full automatic wet laser particle size analyzer adopts MIE scattering principle, with its measure size from 0.01µ m to 1200 µm that offers reliable and repeatable particle size analysis for a diverse range of applications. It uses dual-beam& multiple spectral detection systems and side light scatter test technology to significantly improve precision and performance of test, on behalf of the domestic advanced level in the field.

#### **Features**

- Automatic&User-friendly one-key operation
   Intelligent Operation mode
   All processes including water-supply, dispersion, circulation, testing, cleaning, data record, data analysis, save and print are completed automatically
- Quicker and preciser measurements
   Measurement range is expanded to 0.01um.

   Advanced Detector Design enhances the accuracy and stability of test results
- Simplified calibration process
   Only once a year
- Time-saving dispersion
  Full built-in Sample dispersion system

	Model	PSA-LA2800B	
Dispersion Method	Ultrasonic	Frequency:40KHz Power:35W, Time: ≥1S	
	Stir	Revolutions Speed: 0-300RPM (Adjustable)	
	Circulate	Rated Flow:8L/min Rated Power:10W	
	Sample Pool	Volume:350mL	
	Micro-Sample Pool	Volume: 10mL ( Available)	
	Analysis mode	Free Distribution, R-R Distribution, Logarithm Normal Distribution, Mesh	
		number classification etc.	
	Statistic Method	Volume Distribution, Quantity Distribution	
	Statistic Comparison	Several Testing Results of samples	
		Different batches of samples testing result,	
		Samples before and after processing,	
Software		Test result of samples in different time.	
function	User-defined Analysis	Figure out percentage according to the particle size	
		Figure out particle size according to the percentage	
		Figure out percentage according to the particle size range	
		Meet demands of representation of particle test in different industries	
	Test Report	Word, Excel,Photo(Bmp), Text etc	
	Multiple- language Support	Multiple language Support	
	Intelligent operation	Automatically control water inflow, dispersion, test and analysis. Better	
		Repeatability after remove human-factor	

## PSA-LD3008A/B

### Description

- Advanced Detector Design improves measurement limit&resolution.
- Perfect accuracy and precision guaranteed
- Both manual and fully automatic modes are supported
- Particle distribution, cumulative value curve and typical particle sizes (D10, D50, D90.) user-defined analyze result are provided.
- Flexible test report output and display forms



### **Specifications**

Model	PSA-LD3008A	PSA-LD3008B		
Standard	ISO 13320-1:1999; GB/T19077.1-	ISO 13320-1:1999; GB/T19077.1-2308; Q/0100JWN001-2013		
Measurment Principle	MIE Scattering Principle	MIE Scattering Principle		
Measurment Range	0.1μm -2000μm	0.1µm -1200µm		
Detector Channels Number	100 PCS	80 PCS		
Accuracy error	<1% (Deviation of D50 on national standard sample)			
Repeatability error	<1% (Deviation of D50 on national standard sample )			
Light sources	He-Ne laser (λ= 632.8nm,			
	P>2.0MW Service time>25000hour)			
Dispersion	Dry-turbulence dispersion mode, normal shock wave shear technique			
Operation Mode	Manual & Full automatic			
Feeding	Automatic vibration feeding	Automatic vibration feeding		
Optical Calibration System	Automatic			
Measurment Time	<li>Imin</li>			
Power supply	220V			
Dimensions(L*W*H)	105×44×54cm			
Net Weight	58Kg			

### Description

• PSA-LD3008 is intelligent dry laser particle size analyzer, supporting both manual and full automatic operation modes. Based on MIE scattering principle, Converging light Fourier transform light path, Highly stable He-Ne laser and High sensitive ring photoelectric detector, it guarantees good repeatability and accuracy.lt uses air as dispersion medium, and use turbulent dispersion principle with High precision feeding device, patent powder spray pump and oil-free silent gas source to guarantee the samples to be fully dispersed. It's fit for any dry powder materials, especially the powder that takes chemical reaction with water or changes its shape in liquid. It has same accuracy and repeatability compared to the wet laser particle size analyzer.

#### **Features**

- Highly improved resolution
   A patented technique of Fourier transform
   High precision-automatic optical path calibration
- Human-based operation mode
   Manual and Full automatic, easy to choose.
   Multiple results
- Extended lifespan
   Wearable ceramics improve dispersion system's working life.



	Model	PSA-LD3008A	PSA-LD3008B
Software	Analysis mode	Free Distribution, R-R Distribution,	Logarithm Normal Distribution, Mesh
		number classification etc.	
	Statistic Method	Volume Distribution, Quantity Distribution	
	Statistic Comparison	Several Testing Results of samples	
		Different batches of samples testing result,	
		Samples before and after processing,	
function		Test result of samples in different time.	
	User-defined Analysis	Figure out percentage according	to the particle size
		Figure out particle size according	to the percentage
		Figure out percentage according	to the particle size range
		•	of particle test in different industries
	Test Report	Word, Excel,Photo(Bmp), Text etc	
	Multiple language Support	Multiple language Support	
	Intelligent operation	Better Repeatability after remove human-factor	