





# Laser Particle Size Analyzer



EPCC / PRODUCTS / APPLICATION / SOFTWARE / ACCESSORIES / CONSUMABLES / SERVICES

**Analytical Technologies Limited** 

An ISO 9001 Certified Company

www.analyticalgroup.net



#### **>>** Brief introduction

LPSA 3930D is a universal dry dispersion laser particle size analyzer, using the scientific structure design and a new generation of dispersion device, the dispersion effect is better than similar instruments. Using 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 use air as the dispersing medium, the use of turbulent dispersion principle, with high-precision feeding apparatus and Patent powder injection pumps, No-Oil silent air source, 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 have same accuracy and repeatability compared with the wet method.

#### **Main Features**

• Unique patent technology of optical path and detection system, greatly improve testing resolution.

Converging Fourier transform optical path patent technology overcome lens aperture restriction on the scattering angle, expand testing range in limited space, and add more secondary integrated photodetectors, which can effectively collect scattered light from all angles in the the corresponding test range, make sure the testing accuracy and reliability within the full range.

Scientific and automatic dry dispersing system

Turbulence dispersion patented technology and Normal shock shearing effect make particles sufficient dispersion, dispersion core part using wearable ceramics not only improve dispersion system's working life but ensure more accurate and stable testing result.

Intelligent Operation System realize one key test

Just need put in sample, Dust collection, air supply,feeding and others are all automatic. It only only reduces workload, but eliminate errors caused by human factors, further improve testing accuracy and authenticity of the testing results.

Software support

Unique unconstrained free fitting technology make particle analysis not be restricted by any functions, truly reflect particles distribution, ensure accuracy of testing result.

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### >> Patent Technology

• Dry laser particle size analyzer used in cement, ceramics, pharmaceuticals, dyes, pigments, fillers, chemical products, catalysts, coal dust, additives, pesticides, explosives, graphite, photographic materials, fuel, metal and non-metal powder, carbonated calcium, kaolin and other powder industry, particularly for materials which occurs chemical reaction, the shape change and the loss in the liquid, such as herbs, magnetic materials and relatively wide distribution and larger particles powders, have more unique applicability and practicality.

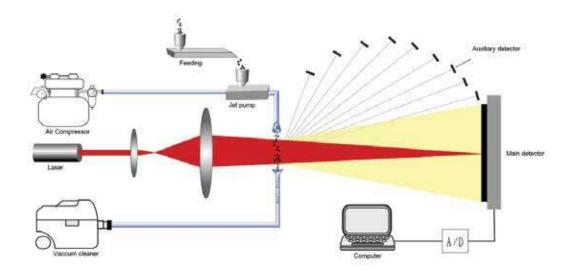
• Optical bench design is protected by patent No.- ZL 2014 2 0378380.8,

• Three dimensional-optical bench alignment system is protected by patent No.- ZL 2013 2 0835882.4.

• MIE scattering principle application patent No.- ZL 2013 2 0812021.4.

• Dry particle size analyzer full sealed sample cuvette application is protected by patent No.- ZL.2011 2 0267646.8.

• Powder dispersion pump design application is protected by patent No.-ZL2007 2 0018648.7





Model Name		LPSA 3930D		LPSA 3930B	
Size Range		0.1µm-300µm		0.1µm-500µm	
Standard		ISO13320-1:1999 Q/0100JWN001-2013	GB/1	GB/T19077.1-2008	
Channels Number		40 pcs	40 pcs	40 pcs	
Accuracy error		<1% (Deviation of	D50 o	D50 on national standard sample)	
Repeatability error		<1% (Deviation of	D50 o	D50 on national standard sample )	
Light Source		He-Ne laser (λ= 632.8nm, P>2.0MW)			
Dispersion Method		Dry-turbulence dispersion mode			
Operation Mode		Manual/Automatic			
Optical Path Calibration System		Automatic			
Dispersing Medium		Compressed air			
Test Speed		<1min for each time			
Operation System		Win XP/ Win 7			
Connection Port		USB			
Software function	Analysis mode	Free Distribution, R-R Distribution, Logarithm Normal Distribution, Mesh number classification			
	Statistic Method	Volume Distribution, Quantity Distribution			
	Statistic Comparison	Several Testing Results of samples Different batches of samples testing result,Samples before and after processing, 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 Meet demands of representation of particle test in different industries.			
	Test Report	Word, Excel,Photo( Bmp), Text etc			
	language Support	English			
	Intelligent Operation Mode	Automatically control Air flow speed, dispersion, test and analysis. Better Repeatability after remove human-factor			
Volume		L88cm×W40cm×H30cm			
Net Weight		36Kg			



## HPLC Servicing, Validation, Trainings and Preventive Maintenance :

HPLC Servicing :HPLC Servicing : We have team of service engineers who can attend to any make of HPLC promptly @the most affordable cost.

Trainings :We also take up preventive Maintenace to reduce downtime of HPLC's Trainings. AMC's/CMC :AMC's/CMC :We offer user training both in-House and at customer sites on HPLC principles, operations, troubleshooting. Validations :Validations :We have protocols for carrying out periodic Validations as per GLP/GMP/USFDA norms.

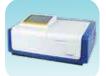
Instruments :Instruments :We offer instruments/Renting Services Modules like pumps, detector etc. on Rent.



#### About Analytical Technologies

Analytical Technologies is synonymous for offering technologies for doing analysis and is the Fastest Growing Global Brand having presence in at least 96 countries across the global. Analytical Technologies Limited is an ISO:9001 Certified Company engaged in Designing, Manufaturing, Marketing & providing Services for the Analytical, Chromatography, Spectroscopy, Bio Technology, Bio Medical, Clinical Diagnostics, Material Science & General Laboratory Instrumentation. Analytical Technologies, India has across the Country operations with at least 4 Regional Offices, 6 Branch Offices & Service Centers. Distributors & Channel partners worldwide.

## **Our Products & Technologies**



UV/VIS Spectro 2080+ Double Beam



**Optical Emission** Spectrophotometer

Fully Automated

CLIA



NOVA-2100

Chemistry Analyzer

DSC/TGA



Chromatograph 3007



Semi Auto Bio



Chromatograph 2979 Plus



HEMA 2062 Hematology Analyzer



Flash

Chromatograph



Micro Plate Reader/Washer



URINOVA 2800

Urine Analyzer

Ion Chromatograph



Liquid Partical Counter



**Total Organic** Carbon 3800



Water purification

system

Chemistry Analyzer

PCR/Gradient PCR/

RTPCR



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TOC Analyzer

Laser Particle Size Analyzer





#### **Regulatory compliances**



### **Corporate Social Responsibility**

Analytical Foundation is a nonprofit organization (NGO) found for the purpose of:



1.Research & Innovation Scientist's awards/QC Professional Award : Quality life is possible by innovation only and the innovation is possible by research only, hence ANALYTICAL FOUNDATION is committed to identify such personallities for their contributions across various field of Science and Technology and awarding them yearly. To participate for award, send us your details of research / testing / publication at Info@analyticalfoundation.org

2. Improving quality of life by offering YOGA Training courses, Work shops/Seminars etc.

3. ANALYTICAL FOUNDATION aims to DETOXIFY human minds, souls and body by means of yoga, Meditation, Ayurveda, Health Care, Awards, Media, Events, Camps etc.





#### Technologies Limited

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#### d Analytical Distributors

#### **Analytical Foundation (Trust)**

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