



SIZER-3930H

Laser Particle Size Analyzer



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

Analytical Technologies Limited

An ISO 9001 Certified Company

www.analyticalgroup.net



General Specifications:

SIZER-3930H Laser Particle Size Analyzer is a high-tech instrument incorporating technologies of optic, mechanic, electric and computer. Thanks to import semiconductor laser, it lasts longer time with excellent monochromaticity. It features advancedmechanical design and integrated microelectric circuit. The accuracy and test speed are improved thanks to highly sensitive photocells and full-course Mie theory executed by excellent and innovative algorism. It is the most cost-effective micron laser particle size analyzer we supply.



Method I:Dispersing Unit

Specifications

- Size range:0.1μm~500μm
- Light source:Semiconductor laser(635nm,3mw,25000hrs)
- Test method: Liquid
- Obscuration:0.05%~1%(subject to gravity,size and refractive index)
- Test time: less than 1 minute, sample preparation not counte
- Scanning speed:2000/sec
- Repeatability:<1%
- Accuracy:<1%
- Power supply: AC 220V ±10%,50Hz or 60Hz,Power:80W
- Computer interface: standard RS-232 serial port
- Operating system: all Windows system
- Dimension:620(L)X333(W)X248(H)mm



Mehtod II:Small Cell Assembly



>> Technologies of Hardware

- AS20 Dispersing Unit features internal ultrasonic, circulation, agitation and timed ultrasonic.
 The peristaltic pump prevents the suspension from being contaminated during circulation to
 secure the accuracy of the test results. AS20 can work with small volume cell or flowthrough
 sample cell. The former caters to organic medium and the latter to water whereas the transfer
 between both is user-friendly.
- The semiconductor laser waved 635nm and powered 3mw works for more than 25000 hours therefore extends the running life and stock life of the particle size analyzer.
- Optimized reverse Furier optical design and unique integration of light path and optical bench contribute to stable light path; moreover it reduces light path adjustment to zero. Thanks to advanced mechanical design and processing technique the unit becomes more compact; streamlined cover makes for easy operation and maintenance; effective shielding and disturbanceresistance technology contributes to electric stability.
- Innovative photocell array improves the resolution of the unit. The major detector array consists of 71 photocells with maximum detecting angle 21.5°. Crossly positioned irregular side array comprises 5 photocells with maximum angle 75°







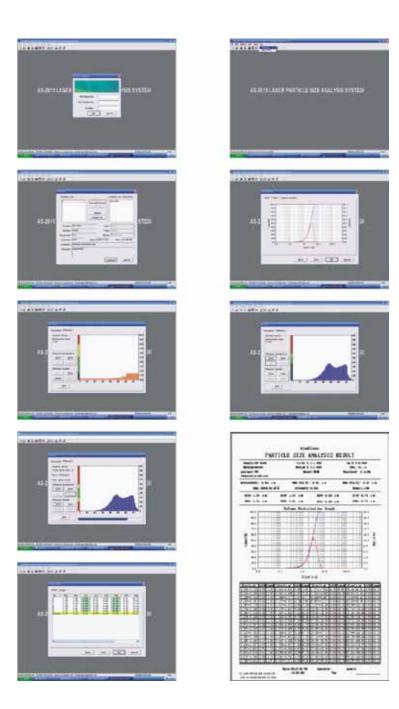
Laser & Optical Bench

Technologies of Software

- Two login ports one for the administrator the other for the operator accessed by password considerably improve the security of the particle size analysis system.
- SIZER-3930H is a high-tech instrument incorporating technologies of optic, mechanic, electric
 and computer. The acquired data is processed by special analysis system and result printed
 out by printer.
- SIZER-3930H works with advanced Mie scattering theory and excellent H.Golub inversion algorism. With the ideal combination of software and hardware, the test is always fast and accurate for whatever unimodal or multimodal distribution.
- Flexible output makes it editable for the data and curve of accumulative distribution, data and histogram of differential distribution and typical values according to specific requirement.
- SIZER-3930H completely meets the requirement of ISO13320-1, an international norm on laser particle size analyzer and each unit goes through strict quality control with national reference material.



Software



Security General Specifications:

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, Diatomite, Emulsion, Environmental, Explosives, Ferrite, 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, Slurries Soil Sediments, Sulfur, Synthetics, Talc, Toners, Tourmaline, Wollastonite, Zeolite, Zirconium Silicate.



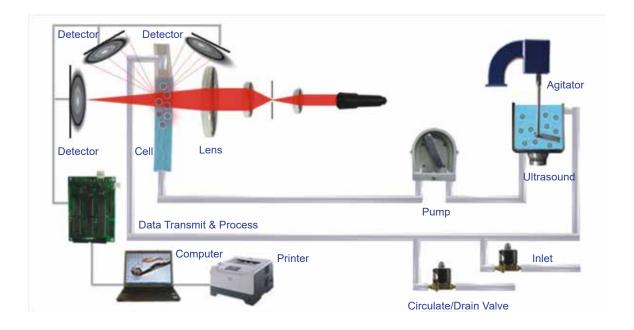
Validation

Dx	D ₁₆	D ₅₀	D ₈₄
Average standard value (μm)	5.7	11.3	18.4
Error Range (μm)	±0.8	±0.8	±0.8

Motto

- Reliable Hardware
- Accurate Software
- Cost-Effective Unit

>> Schematics





Validation

Size Range	most popular micron size range from 0.1 to 500 micrometers	
Accuracy & Repeatability	<1%, completely comply with ISO13320-1	
Applications	1-stop sizer solution for nearly all the powders in micron range	
Sample Driving	clean and effective peristaltic pump improves the Accuracy	
Sample Adding	easy switch between 2: Flow Through & Small Cell Assemblies	
Optical Bench	reduce light path adjustment to 0, free from adjustment forever	
Laser Diode	good monochromaticity with as long as 25000 hours working life	
Photocell	Highly-Sensitive photocells in effective position improves accuracy	
Theory	most advanced Mie Scattering Theory using Laser Diffraction of particles	
Algorism	fast and accurate H.Golub reverse algorism saves Waiting Time	
Login	2 login ports Administrator and Operator make for effective administration	
Measurement	user can Customize key parameters and test very fast in less than 1 minute	
Software	comprehensive and User-Friendly software contribute to a nice sizing experience	
Test Report	standard ISO-13320-1 integrating all concerned data for easy comparison	



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, trouble-

shooting.

Validations :Validations :We have protocols for carrying out periodic Validations as per GLP/GMP/USFDA norms.

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



Infra FTIR



Optima Gas Chromatograph 3007



Optima Gas Chromatograph 2979 Plus



Flash Chromatograph



Atomic Absorption Spectrophotometer



Liquid Partical Counter



Optical Emission Spectrophotometer



DSC/TGA



Semi Auto Bio Chemistry Analyzer



HEMA 2062 Hematology Analyzer



Micro Plate Reader/Washer



URINOVA 2800 Urine Analyzer



Total Organic Carbon 3800



Fully Automated CLIA



NOVA-2100 Chemistry Analyzer



PCR/Gradient PCR/ RTPCR



TOC Analyzer



Laser Particle Size Analyzer



Ion Chromatograph



Water purification system

Analytical ® Technologies Limited

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.

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