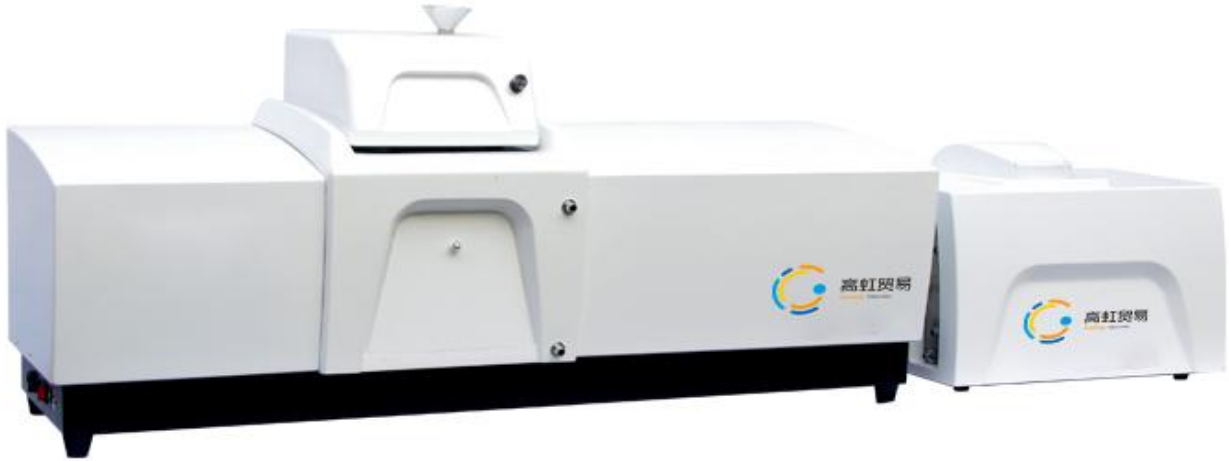


Introduction Of Intelligent Wet and Dry Laser Particle Size Analyzer

Model No.: GaoHong2309A



1. Product Profile:

GaoHong2309A is intelligent full automatic laser particle size analyzer, adopt the most advanced International MIE scattering principle and Fraunhofer diffraction principle, which is integrated model of wet and dry dispersion system, high sensitive and high-resolution photoelectric probe system and imported Canon lens optical path ensure the good accuracy and repeatability of particle size distribution. It's widely used in industrial production quality control departments and research institutions.

2. Main Specifications: (sample cuvette is available)

Model Name		GaoHong2309A
Standard		ISO13320-1:2009,GB/T19007-2016,Q/0100JWN001-2013 Compliance with 21 CFR Part 11
Principle		Laser diffraction principle
Analysis		Mie and Fraunhofer scattering
Detector Arrangement		Log-spaced array, test angle from 0.015 degree to 145 degree
Measuring Range		Wet:0.01μm-2000μm Dry: 0.1μm-2000μm
Silicon Photodetectors		Wet:127 pcs Dry:100 pcs
Accuracy error		Wet<1% Dry<1% (CRM D50)
Repeatability error		Wet<1% Dry<1% (CRM D50)
Light source		High performance semiconductor red laser ($\lambda=639\text{nm}$) P>3.0MW Auxiliary green solid semiconductor laser ($\lambda=405\text{nm}$) P>2.0MW (available)
Optical path		Converging light Fourier transform optical path
Effective focal length		500mm
Laser Safety		Class 1
Wet dispersion	Ultrasonic	Frequency:40KHz Power:60W, Time: $\geq 1\text{S}$
	Stir	Revolutions Speed: 0-3000RPM (Adjustable)
	Circulate	Rated Flow:30L/min Rated Power:70W
	Anti-overflow sensor (UK)	Prevent water overflow and effectively protect the instrument
	Sample tank	Volume:1000mL
	Micro-Sample cuvette	Volume: 10mL (optional), suitable for testing precious samples and corrosive samples.
Dry dispersion		Dry-turbulence dispersion patent technology, 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
Full Test Speed per time		Wet: <2 Min Dry : <1min Interval time per test result :500ms
Outer dimension		L47.24"*W14.57"*H22.05" , L17.4"*W11.02"*H13.46"
Net Weight		62+15 KG / 169.76pound

3. Main Features:

1) Wet and dry, unique separated dispersion unit

This instrument integrated wet and dry dispersion test in one, successfully resolved the problem of dry and wet technology integration, realize one key to switch.

2) Intelligent full automatic operation system and manual operation, freely choose.

Choose automatic mode, very easy and simple to learn, support one key operation.

3) Optical Path System patented technology

Converging light Fourier transform path system, enables scattering light be not restricted to the lens aperture limit, and the dual laser orthogonal light use auxiliary semiconductor laser to expand the measurement range by enlarge scattering angle from 45 degrees to 135 degrees.

4) Automatic Optical path alignment System

which is composed of precise four phase hybrid stepper motor, Its inching precision is reach to micron level, make optimum optical paths to ensure accurate and stable test.

5) Full built-in Sample dispersion system

set mechanical stirring, ultrasonic dispersion, and circulation path in one, It ensures particles uniform dispersion and distribution, avoids many bad phenomenon, such as uneven distribution of particles, large particles deposit because of the long outer dispersing system tube, and it guarantees the representativeness of test result.

6) Instrument Software

Original Unconstrained free fitting technology collect scattering data during the measurement process, make particle analysis not be restricted by any functions, truly reflect particles distribution.

4. Software Function:

1. Analysis Mode

Free Distribution, R-R Distribution, Logarithm Normal Distribution, Mesh number classification etc. meet different demands of particle size statistic in different industries.

2. Statistic Method

Volume Distribution, Quantity Distribution

3. Statistic Comparison

Statistic Several Testing Results to compare and analyze

Get difference by compare test result of different batches of samples, samples before and after processing, and different time.

Have great practical significance to industrial raw materials quality control

4. 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.

5. Test Report

Word, Excel, Photo(Bmp), Text etc.

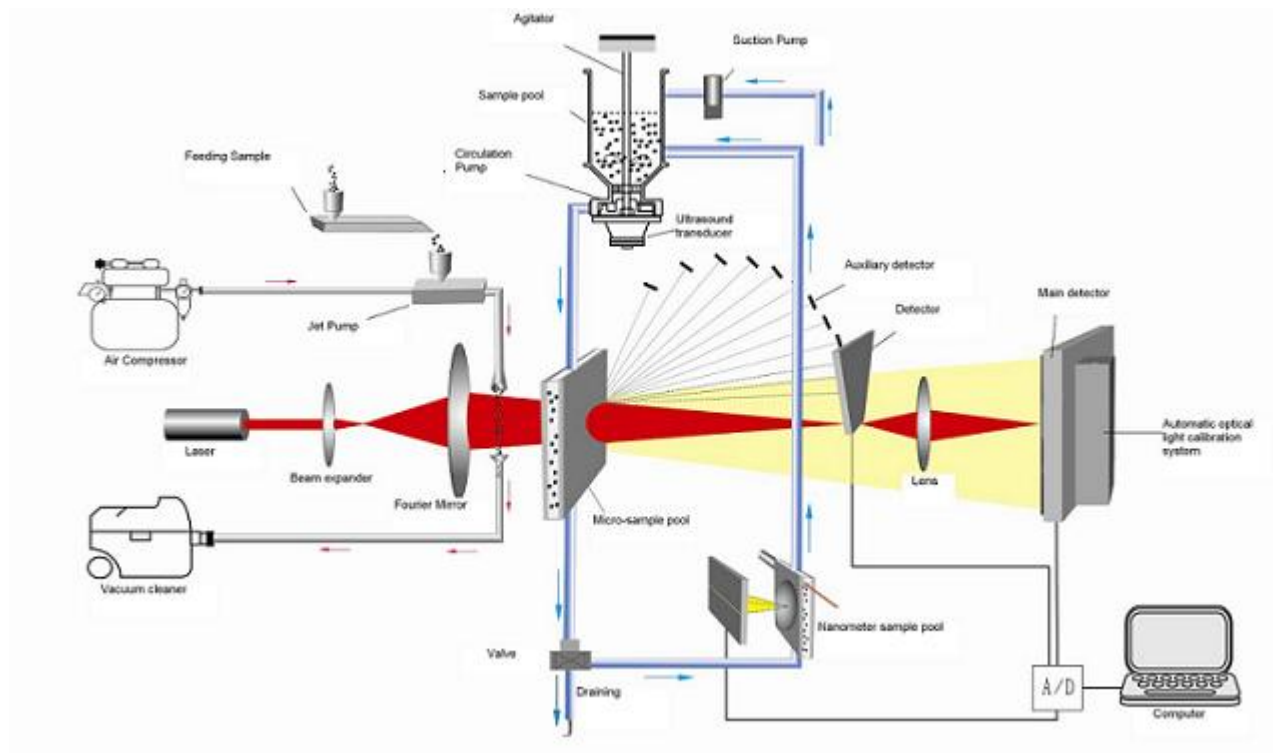
6. Multi-language Support

Chinese & English (Others are available)

7. Intelligent Operation Mode

Automatically control water inflow, dispersion, test and analysis.

Better Repeatability after remove human-factor



5. Application: Solid powder, suspension and emulsion.

6. Standard Accessories list:

NO.	Items	Quantity	Unit
1	GaoHong2309 laser particle size analyzer	1	Set
2	Software	1	Set
3	Software key	1	PCS
4	Standard sample	1	Bottle
5	Power cable	1	PCS
6	Communication cable	1	PCS
7	Sample cuvette	1	PCS
8	Screwdriver	2	PCS
9	Wrench	3	PCS
10	Draining water pipeline	1	PCS
11	Standard sample pipeline	1	Set
12	Clean mirror paper	3	PCS
13	Clean mirror card	1	PCS
14	Sample cuvette brush	2	PCS
15	Spoon	2	PCS
16	2A fuse	5	PCS
17	Quality certificate	1	PCS
18	Warranty Card	1	PCS
19	Manual	1	PCS

7. Patent Technology:

1. Optical bench design is protected by patent No.- ZL 2014 2 0378380.8.
2. Three dimensional-optical bench alignment system is protected by patent No.- ZL 2013 2 0835882.4.
3. MIE scattering principle application patent No.- ZL 2013 2 0812021.4.
4. Dry particle size analyzer full sealed sample cuvette application is protected by patent No.- ZL.2011 2 0267646.8.
5. Dual laser beam orthogonal application is protected by patent No.-ZL 2007 2 0025702.0.
6. Powder dispersion pump design application is protected by patent No.-ZL 2007 2 0018648.7.
7. Wet circulation installation is protected by patent No.-ZL2010 2 0593526.2.