

FULL AUTOMATIC WET & DRY LASER PARTICLE SIZE ANALYZER SIZER - 3610B



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

Analytical Technologies Limited

An ISO 9001 Certified Company

www.analyticalgroup.net

3610B is Full Automatic Wet & Dry Laser Particle Size Analyzer and adopt the most advanced MIE scattering principle and converging light Fourier transform optical path. The high-density probe and the full-scale seamless connection test method ensure the accuracy and repeatability of the test results. Unique wet cycle system ensures the particles are free from particle deposition during the test. No waste liquid accumulation after the test is drained, which ensures the accuracy of the second test and makes the test results more realistic and reliable. The dry dispersion adopts the linear spray dispersion method, and the sample passes through the high pressure. After the gas is dispersed, it flies vertically backwards, avoiding the secondary clusters of the particles to be tested, and adopting the pipeline without the residual design ensures the accuracy of testing different samples. The superior optical path automatic proofing system, dry and wet one-key switching system, dry computer remote control feeding system and other careful design highlight the unique advantages of 3610B.

►► ADVANTAGES :

Measuring Range:	Dry 0.1μm-2000μm ; Wet 0.01μm-2000μm
Accuracy:	Dry ≤1% ; Wet≤0.5% (GBRM D50)
Repeatability:	Dry ≤1% ; Wet≤0.5% (GBRM D50)
Detector:	Dry 118 pieces ; Wet 128 pieces
Laser:	High-Performance Semiconductor Fiber Laser Imported from Japan

- Imported Canon Lens from Japan
- Oil-free silent air compressor
- With Cold dryer
- Standard Operation Procedure (SOP)
- Light Path Automatic Centering Make Accuracy to Micron
- Automatic Operation Mode
- Auto-Feeding System

►► MAIN SPECIFICATIONS:

Model Name		3610B
Standard		ISO13320 1 : 2009 , GB/T 19077-2016
Principle		MIE Scattering Theory
Measuring Range		Dry 0.1μm-2000μm ; Wet 0.01μm-2000μm
Channels Number		Dry 118 pieces ; Wet 128 pieces
Accuracy error		Dry ≤1% ; Wet≤0.5% (GBRM D50)
Repeatability error		Dry ≤1% ; Wet≤0.5% (GBRM D50)
Light source		Fiber Laser Imported from Japan (λ= 650nm, P>10.0MW) (Constant Power) ,lifetime>30000 Hours ;
Lens		Import Canon lens
Wet Dispersion Method	Ultrasonic	Frequency: 40KHz Power: 80W Time can be adjusted
	Stir	ISO13320 1 : 2009 , GB/T 19077-2016 Stir and Circulate integrated design Revolutions Speed: 100-3950RPM (Adjustable)
	Circulate	Rated Flow: 0-10L/min Rated Power: 25W
	Sample Pool	Boiling Sample Pool make dispersion very well Capacity: 190-600mL
	Shading detection	The instrument has a unique real-time detection function of opacity to ensure more accurate sample loading.
	Micro-Sample Pool	The instrument can be equipped with a micro-automatic test device, which can be cycled in 10 ml (optional)
Dry Dispersion Method	Dispersion Method	High pressure air dispersion
	Feeding method	Mechanical stepless speed regulation vibration feeding, software control
	Oil-free silent air compressor	With dust filtering to ensure test accuracy
	Cold dryer	The refrigerating dryer filters the moisture in the air to ensure dispersion

Operation Mode	Full Automatic Operation Mode
Optical Calibration System	Automatic Centering , Automatic Calibration , Automatic Alignment
Test Report	Word, Excel, Photo(Bmp), Text etc dispersion
Multiple-language Support	Multiple Language Support (Chinese and English)
Testing speed	Wet Dispersion : <1min/time ; Dry Dispersion : <1min/time ;
Free bubble	With bubble-free design, no bubble interference data is more accurate
Mis-operation protection	The instrument has a self-protection function that is mis-operated, and the instrument does not respond to misoperations.
Auto-feeding system	High-precision adjustment of vibration feeding to ensure uniform feeding during testing
Operating System	Windows XP/ Windows 7 / Windows 10
Outer dimension	L98cm*W41cm*H45cm
Net weight	35Kg
Certificate	ISO9001
How to Ship	By Air or by Express

►► MAIN FEATURES:

● 1. Advanced design of light path :

3610B adopts concentrated light Fourier transform test technology to ensure the maximum range at the shortest focal length, effectively improve the resolution of the instrument; unique high-density detection unit, the 3610B has a super small particle test Capability, high-density detection unit with 3610B has superior full-scale seamless testing capabilities ;

- 2. Dual optical path design:

The 0.01 micron measurement uses a dual optical path design with a measurement range of 0.01 to 2000 microns, and the auxiliary laser uses a blue 405 nano meter laser. (optional) ;

- 3. Dry and wet one-button switching:

Dry and wet switching will be completed automatically by the instrument, and all processes will be completed within 10s ;

- 4. The main detector Z-direction automatic movement:

After the dry-wet switching, the optical glass will change the focal length due to the intervention of the optical glass. The 3610B will automatically adjust the main detector according to the dry and wet methods, so that the main detector is always in the focal plane On ;

- 5. Large-caliber lens:

Large-caliber Fourier transform lens, more efficient implementation of optical signal Fourier transform, more accurate and more effective ;

- 6. Anti-dry ultrasound:

3610B achieves waterless protection of the sample cell to avoid damage to the ultrasound; at the same time, the ultrasonic power can be adjusted within the range of 0 to 100 watts ;

- 7. Dust-proof and shockproof design:

The whole instrument has been sealed and designed to greatly improve the service life of internal components. The unique suspension structure can effectively avoid the interference of external vibration to the instrument, and make the result test more stable and reliable ;

- 8. Strong anti-corrosion design (optional):

It can be equipped with acid, alkali and oil resistant (including all solvent oil) and organic solvent (such as acetone, phenol, n-hexane and other organic solvents) according to the actual needs of customers ;

- 9. Fog Tip:

The instrument has internal temperature measurement, humidity measurement and water temperature measurement function. The three data are displayed on the computer in real time. When the fogging condition is reached, the sample window fogging warning will be issued ;

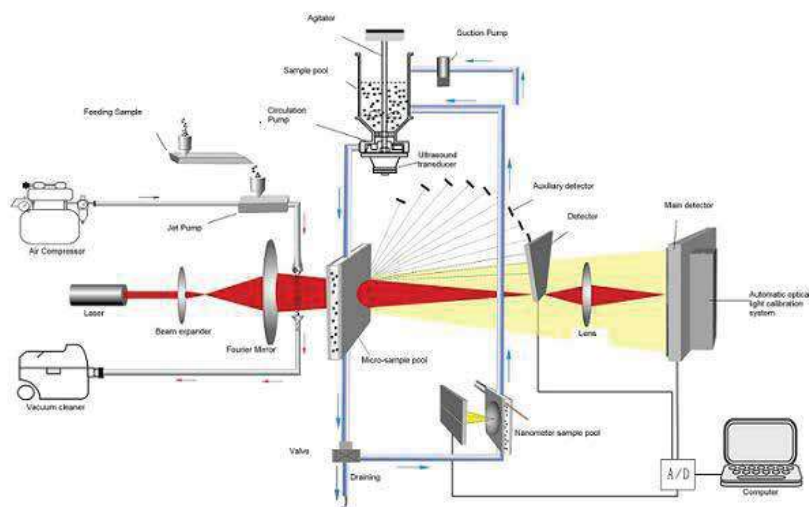
- 10. Imported fiber-optic semiconductor laser:
3610B adopts high-stability, long-life imported high-power fiber-optic output semiconductor laser. The excellent monochromaticity and stability make 3610B have superior test repeatability ;
- 11. Laser power monitoring and automatic adjustment:
The exclusive use of constant power laser, real-time detection of laser power and automatic adjustment function, effectively avoiding the problem of laser power attenuation caused by long-term use. At the same time, the constant current and constant voltage high-filter laser power supply is used to effectively extend the life of the laser, and the normal use reaches more than 30,000 hours ;
- 12. Automatic alignment:
The exclusive use of the combination of mechanical center and optical center, the optical path automatically adjusts the positioning more accurately, reaching the micron level; at the same time, the optical path adjustment speed is faster and faster and can be adjusted in 15 seconds. The self-developed automatic alignment system consists of stepper motor, precision guide rail, precision controller and software system. The minimum step distance is 0.2 microns, ensuring that the focus of the laser beam always passes through the center point of the detector, improving the accuracy of the test results and testing. Repeatability. The automatic alignment system is standard on all models of ATL laser size analyzers ;
- 13. 96-channel simultaneous acquisition of the motherboard:
3610B took the lead in using 96 channels to collect the motherboard at the same time, all channels simultaneously collect signals, the data is more realistic and more reliable, other manufacturers claim that how many times per acquisition is a single acquisition for each channel of all channels, the data is not real ;
- 14. Unique micro-circulation system:
The whole distributed circulation system is optimized. The dispersion medium can be tested by circulating more than 150 ml, and the micro-circulation test is really achieved. All joints adopt the quick-insertion and quick-screw design, and all the pipes can be replaced in a short time. The optimized design ensures no waste residue after draining, ensuring the accuracy of the next test result ;

- 15. Ultra-wide range:
3610B range dry method has reached $0.1\mu\text{m} \sim 2000\mu\text{m}$, wet method $0.01\mu\text{m} \sim 2000\mu\text{m}$;
- 16. Free bubble design:
The new design makes no bubbles enter the test sample window during the whole test process, avoiding bubble interference ;
- 17. Sample no residue design:
The instrument pipeline and drainage structure have been optimized. There is no residual liquid in the instrument pipeline and circulating pump to avoid the impact on the next test data. The dry test also has no residue design ;
- 18. Dry computer remote control feeding:
When the 3610B dry test is performed, the tester can control the feeding speed through the computer remotely, which greatly reduces the labor intensity of the tester ;
- 19. Sample window quick change device:
The newly designed sample window quick change device makes the sample window replacement more convenient and quick .

►► **APPLICATION :**

3610B is widely used in cement, ceramics, medicines, lotions, paints, dyes, pigments, fillers, chemicals, catalysts, drilling mud, abrasives, lubricants, coal, sediment, dust, cells, bacteria, food additives, pesticides, explosives, graphite, photographic materials, fuel, ink, metal and non-metal powder, calcium carbonate, kaolin, coal slurry and other powdered materials.

►► INSTRUMENT WORK PRINCIPLE :



►► STANDARD ACCESSORIES LIST:

No.	Items	Quantity	Unit
1	3610B Wet-Dry laser particle size analyzer	1	SET
2	Software	1	SET
3	Software key	1	PC
4	Standard sample	1	BOTTLE
5	Power cable	1	PC
6	Communication cable	1	PC
7	Sample cuvette	1	PC
8	Screwdriver	2	PCS
9	Wrench	3	PCS
10	Draining water pipeline	1	PC
11	Standard sample pipeline	1	SET
12	Clean mirror paper	3	PCS
13	Clean mirror card	1	PC
14	Sample cuvette brush	2	PCS
15	Spoon	2	PCS
16	2A fuse	5	PCS

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 Maintenance 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 :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, Manufacturing, 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



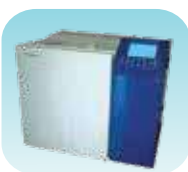
UV/VIS
Spectro 2080+
Double Beam



Infra FTIR



Optima Gas
Chromatograph
3007



Optima Gas
Chromatograph
2979 Plus



Flash
Chromatograph



Atomic Absorption
Spectrophotometer



Liquid Particle
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

Regulatory compliances



Corporate Social Responsibility

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



Analytical
Foundation

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 personalities 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 DETOXYFY human minds,souls and body by means of yoga, Meditation, Ayurveda, Health Care, Awards, Media, Events, Camps etc.

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