

Xenon Test Chamber: 6.5 kW; PLC auto-control

BGD 862

Product Description

Our BGD 862 is a multi-functioning xenon light accelerated weathering tester which is equipped with one unit of a high power 6.5 kW water-cooled xenon lamp which an exposure area of 6,500 sq/cm.

- Powerful functions and reliable test results
- Meets all international standards of xenon test.
- Equipped with American xenon arc lamp, filter and components, ensure to get high and same running parameters. Test results have a good reliability and repeatability comparing with import machines.
- Automatic rotating drum-type sample rack with three floors structure maximizes exposure uniformity over all specimens 6,500cm exposure area, can hold different shapes and sizes samples.
- Can set the cumulative energy total irradiance energy obtained by sample to finish a test procedure.
- English operation window
- Can set and control automatically many test parameters



Standards

ISO 11341, ISO 16474-1, ISO 16474-2, ASTM D3451, ASTM D3794, ASTM D4303,
ASTM D5010, ASTM D6577, ASTM D6695, ASTM G151, ASTM G155, ISO 4892-1,
ISO 4892-2, SAE J2412

Technical Specification

- Irradiance energy can be set and accurately controlled 340nm or 420nm or 300nm 400nm.
- The "Solar Eye" control system can monitor and automatically compensate the change of light intensity caused by ageing or other factors. Working room temperature, BPT black panel temperature and BST black standard temperature can be set and controlled automatically.
- With high precision Pt 100 temperature sensor, all these temperatures could be monitored accurately.
- Working room relative humidity can be set and controlled automatically. With ultrasonic wave humidifying system, the working room can obtain more stable and uniform humidity distribution.
- Can set spray way to sample front spray or back spray, spray time and spray interval time. Simple, easy to use Colorful touch screen and user-friendly operation interface allow operator to set the test parameters and monitor it easily. The

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test procedures can be programmed freely; and up to 16 predetermined procedures can be saved in one time. Every procedure includes up to 10 segments setting data. With USB interface, operator can export any test parameters with Excel format at any time, convenient to check B-SUN's running status at any time.

- Pure deionized water machine is optional. With high purity water, operator can get a more reliable testing result Chamber has alarm function for monitoring water.
- Safe and reliable Many alarm protections
- Big irradiance difference, water conductivity is over limits, too high temperature of cooling water, too low flow rate of cooling water, over-temperature, heating problem.
- B-SUN will stop running automatically and show the alarm information in the operation window.
- Can select TCP/IP Ethernet interface, the user can tele-control the machine through TCP/IP internet.
- Convenient to help customers to solve all problems and do some necessary after service.

Ordering Information <input type="checkbox"/> Technical Item <input type="checkbox"/>	BGD 862 Xenon Test Chamber
Xenon Lamp	6.5 kW water cooling long arc xenon lamp
Light Filter	Import originally from ATLAS, can simulate indoor or outdoor sunshine spectrum
Exposure Area	6,500 cm ²
Wave Length of Xenon Spectrum	Can select 300-800nm simulate sunshine filtrate all wavelength under 300nm or 280-800nm Add UV wave keep some short-wave of UV
Adjustable Irradiance	0.3 1.5 W/ m ² (Single point of control: 340nm) 0.5 2.7 W/ m ² (Single point of control: 420nm) 30 W/m ² 150 W/ m ² (Full spectrum :from 300 400nm)
Lifetime of lamps	2,000 hours
Adjustable BPT	RT+20℃~110℃
Temperature Stability	±1℃

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Temperature Uniformity	$\leq 2^\circ\text{C}$
Temperature Declination	$\leq \pm 1^\circ\text{C}$
Adjustable Humidity	Light: 10%-85% Dark 10%-95%
Rotate speed of sample	1 r/min circle as lamp centre
Spray Function	Can set spray continuous time and spray period
Water demands	High purity deionized water Conductivity $< 2\mu\text{S/cm}$
Flow of Deionized Water	0.2L/min
Overall Size	1,200*1,200*2,000mm L*W*H
Net Weight	500 KG
Optional Pure Water Machine	Size 680*560*1600 L*W*H Weight 120KG

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Main Technical Parameters

Structure	
Cabinet Material	Working room is made up of good quality stainless steel SUS316
Chamber Door	Simple door to left with filter window silicon rubber seal the door edge
Sample Crack	Stainless steel material, its position in the chamber can be adjusted up, middle or down , Sample crack rotate around the centre of lamp
Controller	Siemens programmable controller. LCD touch-screen
Way of adding humidity	Add humidity by ultrasonic humidifier
Black panel thermometer	Heat insulate type black standard thermometer
Cooling System	Cooled by compressor and forced-air blast system
Security Protections And Error Protections	
Xenon Lamp Protection	<p>Protection to cooling water for xenon lamp shortage.</p> <p>Protection to big electric current to xenon lamp</p> <p>Protection to big irradiance deviation for a long time</p>

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Water Shortage Protection	Water shortage, cooling water to lamp shortage, low flow rate of cooling water, water shortage when heating
Power Source Protection	Over-power, over-electric current, shortage phase and wrong phase sequence
Working Room Temperature Protect	Individual over-temperature protection of working room temperature. Over-temperature protection for BPT and BST
Pure System Protect	Monitor the conductivity of pure water at real-time. Once the conductivity $\geq 2\mu\text{S}/\text{cm}$, the machine will stop and alarm
Protection to Radiation	Xenon lamp will turn off automatically when opening the chamber door, in case xenon lamp radiate operator
Installing & Environment Requirements	
Power Source	380V $\pm 10\%$ 3-phases 4 lines or 220V $\pm 10\%$ 2-phase 50 or 60Hz Max. electric current $\geq 40\text{A}$ Max. power: 8kW
Air Outlet	There should be air outlet in the installation place to connect vent pipe
Standard Accessories	

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Xenon Lamp: 1 pc Either Atlas or Chinese brand

Sensor: 2 pcs OSRAM

Xenon Lamp Filter: 1 set Either Atlas or Chinese brand

Siemens Control System: 1 set

Touch Screen Computer Interface: 1 pc

Specimen Holders: 65 pcs

Black Panel Temperature Holders: 2 pcs include 2 units of PT 100

Irradiance Calibration Holder: 1 pc

Accessoires

- BGD 8140 - Calibration Radiometer (Xenon) 340 nm
- BGD 8141 - Calibration Radiometer (Xenon) 420 nm
- BGD 8142 - Calibration Radiometer (Xenon) 300-400 nm
- BGD 8170 - Purity Water System: 20L/h

Disclaimer

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