Small Xenon Test Chamber: 1.8 KW Xenon Lamp

BGD 866-A

Product Description

BGD 866 is a small, simple and economic xenon test chamber. It uses a low power air-cooling xenon lamp to produce enough big irradiance energy in a small space. Moreover, through a special catoptrical system to ensure every exposure sample get the homogeneous irradiance distribution.

BGD 866 is equipped with extended UV filters, thus permit UV which is below the normal cut-on of natural sunlight to pass (equal to simulate sunlight which doesn't come through atmosphere). They are used to produce faster or more severe test results. This test is called as "Artificial Accelerated Weathering Test"

The operator can set all required test parameters (irradiance, test time, BPT etc) through the touch screen, and can check its running status at any time. All running parameters can be exported to computer through the USB interface.

Compared with our model BGD 865, the BGD 866 adds spray function. This spray function is used to simulate rain and humidity when the material is used at outdoor. Furthermore, the operator can set the cumulative energy (Total irradiance energy) obtained by sample to stop a test procedure.

Operator can set all required test parameters (irradiance, test time, BPT etc) through the touch screen, and can check its running status at any time. All running parameters can be exported to computer through the USB-interface.

Technical Specification

- The 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.
- Can set the cumulative energy (total irradiance energy) obtained by sample to finish a test procedure.
- With spray function, you will be able to set spray time and spray interval time.
- The xenon light source correspond with international standards: ensures reproducibility and comparability of testing results.
- Irradiance energy can be accurately controlled. The 'Closed Loop'-control system can automatically compensate the change of light intensity caused by ageing or other factors.

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- Users can easily calibrate and adjust the irradiance or the blackboard temperature by themselves.
- With High precision Pt100 Temperature sensor. Blackboard temperature is auto-controlled during the whole process
- Alarm function for protection: Over-temperature, over heating load, big error for irradiance, auto shut-down protection when opening door.
- Touch screen and user-friendly operation interface allow operator to set the test parameters and monitor all the test process easily.
- Specimen mounting and evaluation is fast and easy with unique slide-out specimen tray.
- Real-time data can be collected and recorded. The incidental USB connector allow users to copy the test data into a USB drive, achieving unattended operation.

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Main Technical Parameters

- Xenon Lamp: one 1.8KW xenon lamp (USA)
- Filter: Daylight filter (optional: extended UV filter or window glass filter)
- Lamp Lifetime: Approx. 1,500 hours
- Exposure Area: 1,000 cm^2 (upto 9 standard samples 150×70mm)
- Lamp (USA): 30W/m^2 ~ 100W/m^2 (300nm ~ 400nm) or 0.3 W/m^2 ~ 0.8 W/m^2 (@ 340nm) or 0.5 W/m^2 ~ 1.5 W/m^2 (@ 420nm)
- Controlling irradiance point: 340nm or 420nm or 300nm ~ 400nm (shows at the same time)
- Adjustable Black Board Temperature Range: RT+30°C~90°C (depends on environment temperature and setting irradiance value)
- Interior Material of Chamber: Stainless steel - SUS 304 material
- Exterior Material of Chamber: Powder coating
- Overall Size: 1000×650×1020mm (L×W×H)
- Net Weight: 135 kg (176 kg Gross weight)
- Power Supply: 50Hz (optional: 60 Hz) ; Max. current 16A ; Max. Power 2.6 kW
- Ordering Information:
  - BGD 866/A - Small Xenon Test Chamber (Equipped with American lamp)
  - BGD 866 - Small Xenon Test Chamber (Equipped with Chinese lamp)

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
- RO20 - RO20 Reverse Osmosis Water Purification System (20 l/h)

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