BEVS Multifunction UV Weather Tester

Can be used in accordance with:
ISO 11507, ISO 4892-1, ISO 4892-3, ASTM D4329, ASTM D4587, ASTM D5208, ASTM D5894, ASTM G151, ASTM G154, GB/T 14522, GB/T 23983, GB/T 23987, GB/T 16422.3, GB/T 4706.1, EN 927-6, EN 12224, EN 13523-10, SAE J2020, IEC 60335-1, IEC 60068-2-87



The BEVS Multifunction UV Weather Tester uses professional ultraviolet fluorescent lamps, advanced intelligent irradiance controller, and newly upgraded temperature and humidity control system. It can accurately simulate various outdoor environmental conditions such as sun light, rain, condensation, high humidity in darkness, and high temperature and dryness. In addition, the reasonable spatial layout makes the distribution of irradiance, temperature, and humidity more uniform and stable, helping you to accurately and quickly evaluate the durability and stability of parts and materials.

The working principle of BEVS Multifunction UV Weather Tester is to simulate the ultraviolet portion of sunlight using fluorescent UV lamps. The irradiance intensity can be adjusted by controlling the lamp power, number of lamps, and the distance between the lamps and the test specimens. Meanwhile, it is equipped with a heating system, as well as condensation and water spray systems, enabling precise control of temperature and humidity to reproduce the variations of temperature and moisture found in natural environments. Under ultraviolet exposure, materials undergo photochemical reactions, thereby accelerating the aging process. Through cyclic testing, the tester simulates the changes of materials under different environmental conditions, allowing evaluation of their durability and aging performance.

Features

- 7-inch touchscreen display with human-machine interface
- Intelligent control system for precise control of test conditions
- Large capacity, capable of handling 48 standard samples at a time
- Automated testing process with data export support
- Simulates natural ultraviolet radiation
- Automatically controls irradiance; irradiance is calibrable and traceable
- Automatically controls light, condensation, and spraying
- Automatically controls blackboard temperature
- Automatically controls temperature/humidity
- Automatic fault identification
- Real-time display of test progress (irradiance, blackboard temperature, temperature/humidity, test time, etc.)
- Remote control

Technical Specifications

Parameter	Specification

Light source	UV fluorescent lamps x 8
Power	40W
Standard sample holders	x 24
Standard specimen	L150 x H70mm x 48
Exposure area	5175cm² / 828in²
Spectral wavelength	UVA-340: 315 - 400nm, UVB-313: 290 - 315nm, UVC-254: 90 - 250nm
Irradiance	UVA-340: 0.3 - 1.55W/m², resolution 0.01W/m²; UVB-313: 0.3 - 1.35W/m², resolution 0.01W/m²; UVC-254: 10 - 60W/m², resolution 1W/m²
Chamber Temperature	Ambient - 60°C, ±2°C
BPT	Ambient - 70°C, ±2°C
BST	Ambient - 70°C, ±2°C
Relative Humidity (RH)	15% - 95%, ±5%
Dimensions	L1400 x W500 x H1375mm
Power Supply	AC 220V ±10V, 50Hz
Water requirements	Deionised Water or Distilled Water (Spraying/Condensation/Atomization)
Power	2kW
Weight	170kg

Order Information

Code	Description
BEVS 3380	Multifunction UV Weather Tester
BEVS 3381	Multifunction UV Weather Tester
BEVS 3382	Multifunction UV Weather Tester
BEVS 3383	Condensation Test Chamber
BEVS 3385	Multifunction UV Weather Tester
BEVS 3380/P/010	UV Fluorescent Lamp UVA340 (Imported)
BEVS 3380/P/011	UV Fluorescent Lamp UVA340
BEVS 3380/P/020	UV Fluorescent Lamp UVB313 (Imported)
BEVS 3380/P/021	UV Fluorescent Lamp UVB313