

#### BGD 8118-S

#### **Product Description**

For all artificial light accelerated aging test chambers, irradiance (irradiation energy) is one of the most important parameters affecting the test results. On the other hand, with the extension of the service time of the aging test chamber, some components (including filters, irradiation probes, sensors, etc.) will age, resulting in deviation of irradiance displayed on the instrument.

Therefore, regular calibration of the irradiation energy of aging instrument is a necessary operation in the process of artificial accelerated aging tests. The multifunctional irradiance radiometer is a brand-new hand-held instrument. It includes a hand-held irradiance radiometer (main body) and one or more special probes.

When using, select the corresponding probe and insert the irradiance radiometer according to the required calibration object, and select the lamp or filter type by selecting the parameter on the display screen of the radiometer. Then place the probe in the calibrated instrument and start the aging test chamber, and calibrate the irradiance in the aging test chamber by reading the value displayed on the irradiance radiometer. When the probe is inserted into the irradiance radiometer, its display screen will automatically read and display the factory number and calibration date of the probe, so that the user can calibrate the probe in time.





BGD 8118-S

### **Technical Specification**

The multifunctional irradiance radiometer can be used to calibrate the irradiance of all aging test chambers (including xenon lamps and fluorescent ultraviolet) supplied by Solvica. Compared with other irradiance radiometers on the market, this multifunctional irradiance radiometer has the following characteristics:

- After inserting the calibration probe, the main body automatically recognizes the type of the probe and its parameters
- Xenon lamp calibration probe which can simultaneously calibrate the irradiance of air-cooled and water-cooled xenon lamps and different filters.
- UV calibration probe can simultaneously calibrate the irradiance of different types of fluorescent UV lamps (UVA / UVB)
- 5-inch capacitive LCD touch screen with HD resolution of 1080×720
- The modular irradiance probe is adopted, which is lower in cost than the traditional instruments with integrated probes
- After the validity period of the self-identification probe expires, the user can choose to recalibrate or replace it
- Built in English and Chinese language



#### BGD 8118-S

#### **Main Technical Parameters**

- Range: 0.00~2.00W/m2 (UVA & UVB)
- Irradiance error: ±10%
- Recommended calibration cycle of probe: one year
- Probe temperature drift: ±0.02%/°C
- Operating environment: 0~50°C; 10%RH~90%RH
- Maximum working temperature of probe: 70°C
- Main body size: 143mm×75mm×20mm
- Net weight (main body and probe): 380g

#### Ordering Information:

#### • BGD 8118/S - Multifunctional Ultraviolet Irradiance Radiometer (UVA&UVB)

- BGD 8140/S Multifunctional Xenon Lamp Irradiance Radiometer (340nm)
- BGD 8141/S Multifunctional Xenon Lamp Irradiance Radiometer (420nm)
- BGD 8142/S Multifunctional Xenon Lamp Irradiance Radiometer (300nm~400nm)

Please select optional probe(s) as accessory in combination with radiometer models listed above.

- BGD 8134 300nm~800nm Xenon Lamp Irradiance Calibration Probe
- BGD 8136 340nm Xenon Lamp Irradiance Calibration Probe
- BGD 8137- 420nm Xenon Lamp Irradiance Calibration Probe
- BGD 8138 300nm~400nm Xenon Lamp Irradiance Calibration Probe
- BGD 8139- UVA&UVB Ultraviolet Irradiance Calibration Probe

#### Accessoires

- BGD 8134 300nm~800nm Xenon Lamp Irradiance Calibration Probe
- BGD 8136 340nm Xenon Lamp Irradiance Calibration Probe
- BGD 8137 420nm Xenon Lamp Irradiance Calibration Probe
- BGD 8138 300nm~400nm Xenon Lamp Irradiance Calibration Probe
- BGD 8139 UVA & UVA Ultraviolet Irradiance Calibration Probe

### Disclaimer

The information given in this sheet is not intended to be exhaustive and any person using the product for any purpose other than that specifically recommended in this sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. Whilst we endeavour to ensure that all advice



#### BGD 8118-S

we give about the product (whether in this sheet or otherwise) is correct we have no control over either the quality or condition of the product or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing to do so, we do not accept any liability whatsoever or howsoever arising for the performance of the product or for any loss or damage (other than death or personal injury resulting from our negligence) arising out of the use of the product. The information contained in this sheet is liable to modification from time to time in the light of experience and our policy of continuous product development