

Irradiation chamber BS-02



The irradiation chamber BS-02 is compact, robust equipment for the time- or dose-controlled irradiation of samples with UV or visible light. The chamber can be fully equipped for one of the spectral regions UV-C, UV-B, UV-A, or daylight D65 to achieve the highest irradiance. Alternately, the use of two separately controlled lamp groups for different spectral regions allows for especially flexible operation of the chamber. With interchangeable lamps, the BS-02 is really flexible. No tools are required for lamp replacement.

The interior irradiation chamber has a base area of 46 x 32 cm and a height of 29 cm. The sample chamber operating temperature is about $25\,^{\circ}\text{C}$ so that thermal damage to the specimen is avoided. Due to the high uniformity of the irradiation, the samples may be positioned in any order.

The optional UV-MAT irradiation control can separately control two different spectral ranges and obtain a constant dose regardless of lamp aging, pollution, or temperature.



Compact dimentisons



Large and secured front door

Applications:

- · Irradiation of bacteria and cell cultures
- Photostability testing
- UV and daylight materials testing
- UV curing, sealing, and bonding
- Disinfection

With interchangeable lamps, the BS-02 is extremly flexible. For the lamp replacement no tools are required.

TECHNICAL DATA

Interior chamber	46 x 32 x 29 cm
Dimensions	55,5 x 40 x 43 cm
Weight	~ 32 kg
Power consumption	180 W
Mains	230 V _{AC} , 2 A
	110 V _{AC} , 4 A, optional
Operation temperature	10 to 40 °C
Humidity	< 80% non-condensing
Lawn lifetime	up to 10 000 b
Lamp lifetime	up to 10.000 h
Number of lamps	8
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Number of lamps	8
Number of lamps Sample temperature	8 25 °C +/- 5°C
Number of lamps Sample temperature Spectra ranges	8 25 °C +/- 5°C 1 standard, 2-4 optional
Number of lamps Sample temperature Spectra ranges Irradiance UVA	8 25 °C +/- 5°C 1 standard, 2-4 optional 10 mW/cm ²

UV-MAT irradiation control continuously measures the irradiance and determines the target irradiation dose.



Radiation doses for different spectral ranges can be controlled separately. Therefore, calibrated radiometer sensors are used.

The integrated diffuser ensures the required cosine correction. Excellent long-term stability is achieved through the use of appropriate materials. The sensors are calibrated with traceability to PTB (Physikalisch Technische Bundesanstalt, the German national test authority);

after being calibrated, they are supplied with a factory calibration certificate.



PART NUMBERS

BS-02	860802
UV-MAT	820220
2. spectral range	86080Z
Lamp dimming	86080D
Timer	86081T







