

# **UV point source HP-120i**



The HP-120i is a high-intensity short arc light source for quick UV spot curing within seconds. As a microprocessor controlled spotlight source with light guide, HP-120i is a reliable and economical "cold" light source for irradiation with high-intensity UV-A radiation and blue light. The heat transfer in the material is minimized due to the absence of ineffective red and near-infrared radiation. The spotlight source uses fiber-optic cables in various configurations for flexible irradiation of one to four points. Depending on the light guide, UV-A irradiances of up to 15,000 mW/cm² can be achieved.

The exposure time can be set through a digital timer with a resolution of 0.1 s. The shutter can also be switched by a foot switch or via a PLC system controller by an external contact.

The typical lamp life is 2,000 hours. To achieve uniform irradiation, the lamp power is stabilized.

For irradiance calibration, we recommend using the RM-12 radiometer with a UVA sensor that is calibrated against a PTB reference.

## **HIGHLIGHTS**

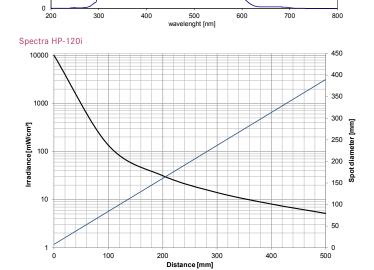
- Irradiance of up to 15W/cm²
- Integrated shutter and timer for precise dose control
- Lamp lifetime of 2000 h (typical)
- Single and multi-spot light guides
- Timer and trigger funtions adjustable
- Graphical display

### **APPLICATIONS**

- UV curing, bonding, and sealing
- Irradiation of biological, pharmaceutical and medical samples
- Materials testing
- Fluorescence excitation

#### **TECHNICAL DATA**

UV/VIS emission	~ 8 W
UV-A emission	> 4 W
Wavelength	280 - 700 nm
Light guide	light guide, Ø 5 or 8 mm
	multiple light guides, Ø 3mm
	length 1 m , opt. up to 4 m
Lamp power	120 W
Lamp lifetime	2000 h (typical)
Dimensions	305 mm x 358 mm x 145 mm
Weight	~ 8,2 kg
Mains	110 - 230 V <sub>AC</sub> , 50/60 Hz
Classification	risk group 3 according
	DIN EN 62471:2009-03
Operation temperature	5 to 40 °C
Storage temperature	-10 to 60 °C
Humidity	< 80%, non-condensing



Irradiance and spot diameter vs. distance for 8 mm light quide

# **SCOPE OF DELIVERY**

HP-120i, original lamp, mains cable

#### **SAFETY**

The device emits ultraviolet radiation and intense visible light. UV radiation is invisible and harmful to skin and eyes. UV radiation can cause cataracts in the eye lens, retina damage and conjunctivitis. Do not stare into the light source with unprotected eyes. Always use suitable UV safety goggles when operating the device.

UV radiation can also cause skin discoloration, erythema and, inter alia, skin aging. Please use suitable clothing, gloves and/or sunscreen depending on exposure.

The devices are designed and classified in accordance with DIN EN 62471:2009-03 "Photobiological safety of lamps and lamp systems".

# **PART NUMBERS**

0,8

spectral irradiance

<u>ə</u> 0,4

0,2

UV spot source HP-120i	860517
1-way light guide, Ø 8 mm	860514L1
2-way light guide, Ø 3 mm	860514L2
3-way light guide, Ø 3 mm	860514L3
4-way light guide, Ø 3 mm	860514L4
Condensor f = 25 mm	860514/C
Foot switch	860515/FS
Spare lamp	860514/LQ
Shutter monitoring	860514SH
UV safety goggles	918800

We will gladly assist you with UV job security and risk assessment according to EN 14255:2005.

