



LED

## LED Cube 100

Compact LED-UV curing chamber

Max. irradiation intensity: up to 1.200 mW/cm<sup>2</sup>

Wavelength: 365, 385, 395, 405 and 460 nm

Air cooled

### System-Features

- Extremely long LED service life
- Available in different wavelengths
- Power control between 2 - 100 %
- Intelligent door-LED-connection

### Advantages

- Homogenous irradiation
- Suitable for temperature sensitive materials
- No warm-up phase
- No stand-by time
- Lamp units with different wavelengths easily exchangeable

## LED Cube 100

The LED Cube 100 is a compact UV irradiation chamber for use in the laboratory or for manual production. By employing different LED units the emission range is adjustable to various fields of application.

The LED assembly, as well as an electronic power control, guarantee high intensity and homogenous distribution of light. The recognition of LED-malfunction and a comprehensive monitoring function provide very high process stability.

The typical **service life of a LED is more than 20.000 hours\***. The LED Cube 100 can be switched on and off as often as necessary, as LEDs do not require a heating or cooling phase.

The emitted wavelengths are available in 365/385/395/405/460 nm +/- 10 nm. This allows to adapt the LED head to the existing application.

### Applications

The LED Cube 100, controlled by the LED **powerdrive**, is suited for various applications:

- Bonding, fixing or encapsulating components in the electronic, optical or medical sector
- highly intensive UV irradiation in the biological, chemical and pharmaceutical sector

### Compact dimensions

The irradiation chamber LED Cube 100 with a usable irradiation area of approx. 180 x 180 x 180 mm (HxWxD) is especially suitable for smaller workpieces or workpiece carriers. The reflective inner surface and the optimized reflector geometrics provide for a **homogenous irradiation** and a high process reliability.

### LED activation

The irradiation time can be optionally set between the ranges 0,01 - 99,99 sec. or 0,1 - 999,9 sec. or 1 - 9999 sec. Alternatively, continuous operation can be chosen. The operating status and the actual temperatures of the LED segments, as well as the irradiation times, can be seen on the display at one glance.

The **electrical LED power can be adjusted in 1%-steps between 2 % and 100 %**. The light exposure can be activated whether by keypad or foot switch. The unit records the service hours of the LED head and of the controller.

### Operational safety

The LED Cube 100 has got a safety system which guarantees that the user is safe from UV radiation. Door and LEDs are logically connected: When the door is opened during operation, the LEDs are switched-off immediately.



### Advantages of LED technology

LEDs **do not emit IR radiation**. Even **temperature-sensitive materials** can be irradiated. The **different available spectra** guarantee safe and fast curing. As LEDs do not require a warm-up phase, LED heads can be switched on and off without any problems: they are **ready for immediate operation**.

### Technical data

LED service life	> 20.000 hours*
adjustment range of timer (in sec.)	0,01 - 99,99 or 0,1 - 999,9 or 1 - 9999 or continuous operation
wavelengths in nm (+/- 10)	365 385 395 405 460
typ. intensity in mW/cm <sup>2</sup> **	200 450 900 1000 1200
power supply	90 V – 264 V,
LED <b>powerdrive</b>	47 Hz – 63 Hz
max. input current	2,2 A

- \* typical lifetime under specified operating conditions  
 \*\* measured with Höhle LED sensors for UV meter



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