





LED Cube 100 IC

Compact LED-UV curing chamber

Max. irradiation intensity: up to 3.000 mW/cm²

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-LEDconnection

Advantages

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

LED Cube 100 IC

The LED Cube 100 IC is a compact UV irradiation chamber for use in the laboratory or for manual production. By employing different LED units the emission range and the intensities are 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 LED Cube 100 IC can optionally be operated with the powerful LED Spot 100 HP IC for high-intensity irradiation or with the LED Spot 100 IC for all processes which require lower intensities.

The typical **service life of a LED is more than 20.000 hours*****. The LED Cube 100 IC 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 unit to the existing application.

Applications

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

Compact dimensions

The irradiation chamber LED Cube 100 IC with a usable irradiation area of approx. $180 \times 180 \times 180 \text{ mm}$ (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 device records the service hours of the LED unit and of the controller.

Operational safety

The LED Cube 100 IC 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. As LEDs do not require a warm-up phase, LEDs 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	0,01 - 99,99 or 0,1 - 999,9 or
timer (in sec.)	1 - 9999 or continuous operation
wavelengths in nm	365 385 395 405 460
typ. intensity in mW/cm²	
LED Spot 100 HP IC	1.200* 2.200* 2.200* 2.200* 3.000**
LED Spot 100 IC	600* 1.100* 1.100* 1.100* 1.500**
power supply	115 – 230 V,
LED power drive	50 – 60 Hz
max. input current	5,0 A

- * measured with Hönle UV meter and LED surface sensor, distance 0 mm
- ** measured with Hönle UV meter and VIS surface sensor, distance 0 mm
- *** typical lifetime under specified operating conditions

