



**New:
1.000 mW/cm²**

LED

LED Spot 100 High Power & LED powerdrive

UV LED flood lamp

Max. irradiation intensity: up to **1.000 mW/cm²**

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

Air cooled

System features

- Extremely long LED service life
- Available in different wavelengths
- Intelligent power control
- Controller for one, two or three LED Spot 100 available
- 100 mm x 100 mm Irradiation area

Advantages

- Reduction of maintenance costs
- Homogeneous irradiation of larger areas
- Suitable for temperature sensitive materials
- No heating phase
- No stand-by time
- Stackable for bigger areas

LED Spot 100 High Power & LED Power Drive

The **LED Spot** has been developed for all applications requiring **a highly intensive UV irradiance over a large area**. 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. So, especially in fully automated production lines, repeatable results can be realised even in shortest cycle times.

The typical **service life of a LED is longer than 20.000 hours***. The LED Spot 100 can be switched on and off as often as necessary. It does not require a heating or cooling phase.

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

The square light emitting aperture has a size of 100 mm x 100 mm. Depending on the required intensity/homogeneity it can be increased considerably by changing the distance to the substrate. For even bigger irradiation fields, several LED Spots 100 can be connected without gaps. An integrated fan provides adequate cooling even for continuous operation.



Applications

The LED Spot 100 controlled by LED Power Drive is appropriate for various applications, such as

- Bonding, fixing or encapsulating of components in the electronic, medical or optical sector
- Fluorescence stimulation for materials testing and picture processing
- High-intensity UV irradiation in the biological, chemical and pharmaceutical sector

LED Spot 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 between 10 % and 100 % in 1 %-steps.**

The unit registers the LED operating hours as well as the units operating hours.

In summary, the following features characterize the LED Power Drive controller:

- Large and clear display with all relevant information
- Intelligent power control
- Temperature / error control of LED
- Shortest cycle time 0,01 s
- Up to three LED Spot 100's can be operated by one control system

Interfaces

The LED Power Drive controller has the following interfaces:

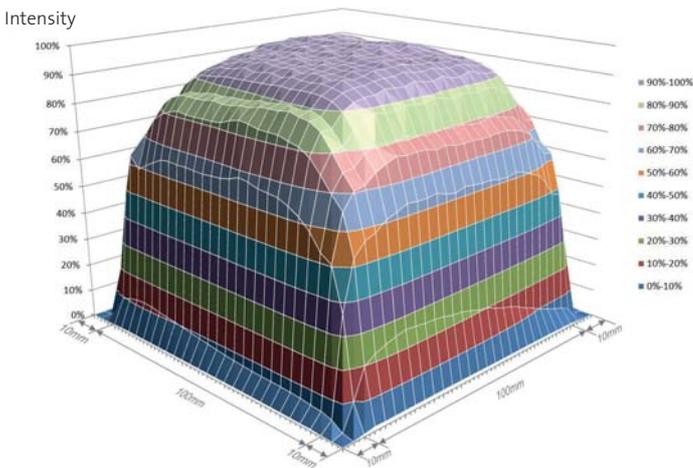
- Analog preselected power range 1V - 10V \triangleq 10% - 100%

- PLC inputs: LED on, LED enable
- PLC outputs: LED on, LED off, LED error, LED warning
- Dry contact with selectable function (cf. PLC outputs)
- Foot switch
- Release safety circuit (=LED enable)

Technical data

| | | | | |
|--|---|-----|-----|------|
| LED service life | > 20.000 hours* | | | |
| adjustment range of timer | 0,01 - 99,99 or 0,1 - 999,9 or 1 - 9999 or continuous operation | | | |
| wavelengths in nm | 365 | 385 | 395 | 405 |
| typical intensity in mW/cm ² ** | 100 | 450 | 450 | 1000 |
| power supply LED Power Drive | 90 V – 264 V, 47 Hz – 63 Hz | | | |
| max. input current | 2,2 A | | | |
| irradiation area | 100 x 100 mm | | | |
| dimensions LED-head without connectors (H x W x D) | ca. 150 x 111 x 111 mm | | | |

* typical service referred to standard operating conditions

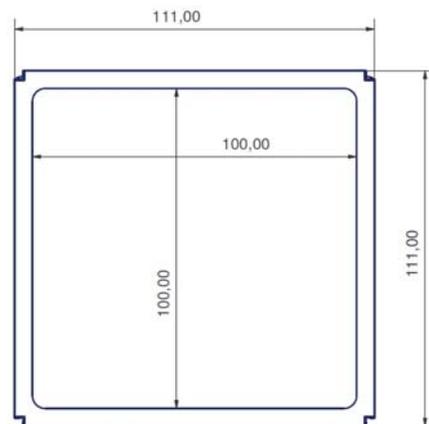
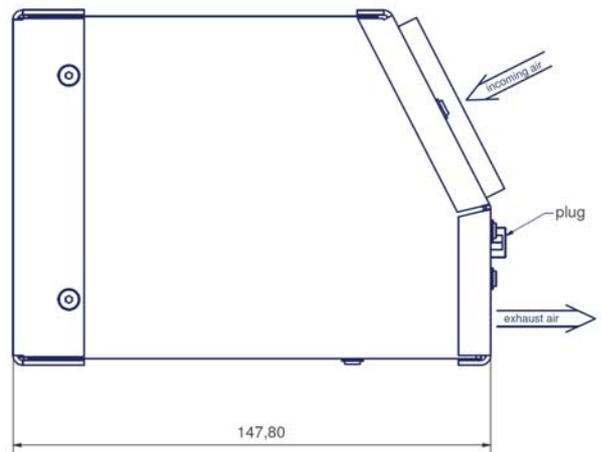


Intensity distribution LED Spot 100 405 nm, distance 5 mm

** measured with Hönle UV meter and LED surface sensor, distance 0 mm

Advantages of the 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 heating phase, LED heads can be switched on and off without any problems: **they are ready for immediate operation**.



More Hönle LED-Units

watercooled types



LED Spot W

The LED Spot W allows an extremely high UV intensity output - and requires only a very small amount of space.



LED Powerline

The maximum length is freely selectable. The LED Powerline is available in wavelengths of 365/375/385/395/405 nm.

aircooled types



LED Spot

The LED Spot operates only with air-cooling and is characterized by a highly intensive irradiation power.



Bluepoint LED

bluepoint LED has been developed for all applications requiring a most intensive punctiform UV irradiation.



LED Pen 2.0

The UV-Pen is a LED-technology based reliable point source with an output spectrum of 365 nm +/- 10 nm.



LED Power Pen 2.0

By using a unique lens-system this high-performance version of the LED Pen offers a focused UVA intensity of 7.500 mW/cm² (within 12 mm distance to the irradiation exit).

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|--------------------|--|--------|--------|---------|---------|-----------|
| hönle group | | Curing | Drying | Bonding | Potting | Measuring |
| | | | | | | |
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