## LED Spot W & LED powerdrive

**UV LED flood lamp**

- **Max. irradiation intensity:** up to 30,000 mW/cm²
- **Wavelength:** 365, 385, 395, 405 and 460 nm
- **Water cooled**

<table>
<thead>
<tr>
<th>System features</th>
<th>Advantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Very small lamp head design</td>
<td>• Reduction of maintenance costs</td>
</tr>
<tr>
<td>• Extremely long LED service life</td>
<td>• Homogeneous irradiation of larger areas</td>
</tr>
<tr>
<td>• Available in different wavelengths</td>
<td>• Suitable for temperature sensitive materials</td>
</tr>
<tr>
<td>• Intelligent power control</td>
<td>• No warm-up phase</td>
</tr>
<tr>
<td>• Controller for one, two or three LED Spot W available</td>
<td>• No standby-time</td>
</tr>
<tr>
<td></td>
<td>• Clean room capable</td>
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</table>
The **LED Spot W** provides a *most intensive UV irradiation on a larger area*, while having only *very small space requirements*. Thanks to the external water cooling the extremely small lamp head design offers highest intensity. As the LED Spot does not require an integrated fan, it can also be used in a clean room environment.

The **LED Spot W** is appropriate for various applications, such as:

- Bonding, fixing or encapsulating of components in the electronic, optical or medical-technical sector
- Fluorescence stimulation for materials testing; also suitable for automatic image processing
- High-intensive UV irradiation in the chemical, biological and pharmaceutical sector
- UV-irradiation for different applications in a clean room

**Applications**

The LED Spot controlled by the LED power drive controller is appropriate for various applications, such as:

- Bonding, fixing or encapsulating of components in the electronic, optical or medical-technical sector
- Fluorescence stimulation for materials testing; also suitable for automatic image processing
- High-intensive UV irradiation in the chemical, biological and pharmaceutical sector
- UV-irradiation for different applications in a clean room

**LED Spot control**

The LED power drive allows the independent operation of up to 3 **LED Spots W**. The adjustment of the irradiation time is freely selectable in the ranges of 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 temperature of the LED segments as well as the irradiation time can be seen on the display at a glance. The **electrical LED power can be adjusted between 2 % and 100 % in 1 %-steps**.

The LED power drive controller is characterized by the following features:

- Large and clearly arranged display
- Intelligent power control
- LED temperature and error monitoring
- Shortest cycle time (0.01 s when set via display / 100 µs with external control)

In addition the LED power drive controller is characterized by the following features:

The emitted wavelengths are available in 365/385/395/405/460 nm +/- 10 nm. It is thus possible to adapt the LED head to any application in question.
Interfaces

The LED powerdrive controller has the following interfaces:

- Analog preselected target value 0,2V - 10V $\equiv$ 2% - 100%
- PLC inputs: LED on, LED enable
- PLC outputs: LED is on, LED is off, LED error, LED warning
- Dry relay contact function (see PLC outputs) or for driving an external cooling device
- Foot switch
- LED enable signal

Technical data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>LED service life</td>
<td>&gt; 20.000 hours*</td>
</tr>
<tr>
<td>adjustment range of timer (in seconds)</td>
<td>0,01 - 99,99 or 0,1 - 999,9 or 1-9999 or continuous operation</td>
</tr>
<tr>
<td>wavelength in nm typical intensity in mW/cm² **</td>
<td>365 385 395 405 460 14000 16000 25000 25000 30000</td>
</tr>
<tr>
<td>power supply</td>
<td>90 V – 264 V, 47 Hz – 63 Hz</td>
</tr>
<tr>
<td>max. input current</td>
<td>2,2 A</td>
</tr>
<tr>
<td>Power rating</td>
<td>200 W</td>
</tr>
<tr>
<td>dimensions LED-head without connectors (H x B x T)</td>
<td>ca. 60 x 50 x 17 mm</td>
</tr>
<tr>
<td>cooling</td>
<td>External water cooling</td>
</tr>
</tbody>
</table>

** typical lifetime under specified operating conditions
** measured with Hönle LED sensors for UV meter

Advantages of the LED technology

LEDs do not emit IR radiation. Due to the inferior temperature load of the substrate, even temperature-sensitive materials can be irradiated. The different spectra available guarantee a 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 immediately ready for operation.
More Hönle LED-Units

Water cooled type
Air cooled type

LED Powerline Focus
Almost distance-independent high intensity due to focusing optics

LED Powerline LC
Maximal length depends on application (lengths variable in 40 mm-steps).
The LED Powerline LC is available in the wavelengths 365/385/395/405 nm.

jetCURE LED
The high-performance array is modularly controllable and changeable (grid 82 mm) as well as continuously adjustable.

LED Powerline AC/IC
Air cooled high-performance UV LED array optional with LED powerdrive IC

LED Spot 40 IC
The LED Spot 40 IC was developed for all applications requiring a compact flood unit with high intensities.

LED Spot 100 IC / HP IC
The square light-emitting aperture has a size of about 100 mm x 100 mm. For bigger irradiation fields, several LED Spots 100 can be connected without gaps.

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

LED Power Pen 2.0
This handy LED point source is available in the wavelengths 365 nm and 405 nm. Depending on the wavelength it is able to generate UVA-intensities of either 10.000 mW/cm² or 16.000 mW/cm².

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