# hõnle group





LED Spot 100 IC / LED Spot 100 HP IC LED Spot 200 HP IC & LED powerdrive IC

## System features

- Irradiation with more than 5.000 mW/cm<sup>2</sup>
- Wavelengths: 365, 385, 395, 405 und 460 nm
- Irradiation area: 100 x 100 mm resp. 200 x 50 mm

## Advantages

- Low temperature load
- Stackable without gap for larger areas
- IC (Integrated Controller) or Plug & Play with
  LED powerdrive IC

# LED Spot 100 IC / 100 HP IC & LED Spot 200 HP IC

The solution for all applications which need a highly intensive UV irradiation on lager areas.

# **Your Benefit**

- Homogeneous irradiation of the substrate due to a uniform light distribution for perfect curing results
- Process reliability thanks to the recognition of LEDmalfunction and comprehensive monitoring functions
- A maximum of productivity as well as safe and reproducible quality in automated production lines
- Flexibility of use: Irradiation of different geometries by a modular stringing together of several LED Spots for homogenuous irradiation
- Suitable for any substrate due to different wavelengths

## **Application fields**

- Bonding, fixing or encapsulating of components in the sectors Electronics, Opticals or Medical Engineering
- Fluorescence simulation for material testings, particle detection and optimizing AOI applications
- High-intensive UV irradiation in the biochemical sector

# **Advantages of LED Technology**

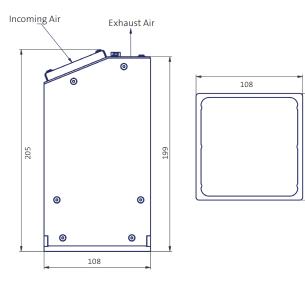
- Low-maintenance due to typically more than **20.000 hours LED-lifetime**
- No warm-up phase, ready for **immediate operation**
- No IR irradiation, lowest temperature load for temperature-sensitive materials

Туре	LED Spot 100 IC / LED Spot 100 HP IC	LED Spot 200 HP IC
Available wavelengths [nm], +/- 10 nm	365   385   395   405   460	365   385   395   405   460**
Typical intensities [mW/cm²]*	1.100   1.500   1.700   2.000   2.500**	
Typical intensities HP version [mW/cm <sup>2</sup> ]*	2.200   3.000   3.500   4.000   5.000**	2.200   3.000   3.500   4.000   5.000**
Dimensions [mm] ( B x T x H)	108 x 108 x 205	203 x 63 x 205
Light-emitting aperture in mm:	100 × 100	200 x 50
Interfaces	Digital PLC interface, BUS control via RS485	
Safety	Integrated Control (IC): monitoring functions including short-circuit, interruption, excess temperature and reading out of operation hours	
Cooling	air cooling (apt for continuous operation)	

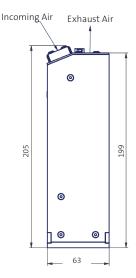
108

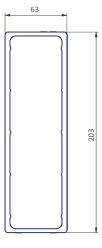
measured with LED-F3 /(LED-VIS-F1) \*\* surface sensor for UV-Meter

# LED Spot 100 (HP) IC



# LED Spot 200 HP IC





# Facts & Figures

# **Control and Supply**

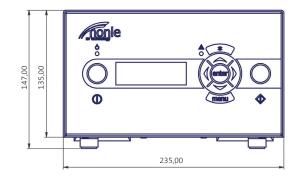
Mains supply and control of all LED Spots IC are provided by the optionally available LED powerdrive IC or directly by customers' power supply and PLC.

# **Control and Supply via LED powerdrive IC**

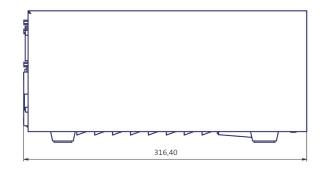
- Plug&Play solution
- Automatic recognition of the connected LED Spot
- For direct reading on the display **at one glance:** operation status, LED temperature, irradiation time
- Electrical LED power adjustable in 1%-steps from 10% to 100%
- Comprehensive functions for monitoring, safety and stability of the process
- Available in various versions, **optionally with safety-related release according to performance level e**
- Further information and adjustments in the service menu

## Userfriendly

- Intuitive operation on clearly arranged display
- **Operation panel** for a fast and guided adjustment of the main parameters: power and time
- Saving of the adjusted parameters due to key-lock-function



Front view



Side view

Control & Supply	LED powerdrive IC	Customer-specific
of the LED Spot IC	LED powerdrive 400 IC: for 1 LED Spot LED powerdrive 1200 IC: for up to 3 LED Spots	Supply via external power supply plus control of interface by the customer
Intensity regulation adjustable in [%]	10% - 100% (1%-steps ) analog dimming via 0-10-V signal	
Adjustment of irradiation times	sequential from 0,01 to 9999 s suitable for continuous operation	
Interfaces	Digital PLC interface   RS-232	Control via SPS interface / RS-485
Cycle resp. reaction times [sec]	0,1 s	100 µs
Monitoring	Monitoring of LED segment relating temperature, short-circuit, malfunction, operation hours	Integrated control (IC) inside LED Spot
Safety	Safety-related release according to performance level e in HS version	-
Further options	Controllable via foot switch Adapter for operation with up to 3 foot switches	



## Unique system competence for industrial bonding processes

**Dr. Hönle AG** offers a various range of **LED-UV and conventional UV systems** which lead to a complete curing of adhesives or sealants within only fractions of a second.

Perfectly matched: the **high-tech adhesives** of our subsidiary **Panacol** which are used for industrial bonding processes worldwide for example in key industries such as Electronics, Microelectronics, Optics, Medical Devices, Automotive and E-Mobility.



**Contact for UV curing:** Email: uv@hoenle.de Phone: +49 8105 2083-0



**Contact for Adhesives:** Email: info@panacol.de Phone: +49 6171 6202-0

# More Hönle LED units (Examples)

#### Air cooled type (=)





**LED Spot 40 IC** compact flood unit with high intensities



LED Powerline LC length variable in 40-mm steps in the wavelengths 365/385/ 395/405 nm



**LED Powerline AC/IC** air cooled high-performance UV-LED array



**bluepoint LED eco** a highly intensive UV-LEDpoint source



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