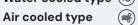
# hoenle



# **MORE HOENLE LED-UNITS**

Water cooled type 🚳





#### **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 Focus**

Almost distance-independent high intensity due to focusing optics.



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

The light-emitting aperture has a size of about 100 x 100 or 200 x 50 mm. For bigger irradiation fields, several LED Spots can be arranged modularly.



#### **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.



# ietCURE LED

Modularly controll- and changeable (grid 41 mm) as well as continuously adjustable. Available in two versions which differ in their cooling air duct.



# 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 wavelenght it is able to generate UVA-intensities of either 10.000 mW/cm<sup>2</sup> or 16.000 mW/cm<sup>2</sup>.





# AIR COOLED

Max. irradiation intensity: up to 22.000 mW/cm<sup>2</sup> Wavelength: 365, 385, 395 und 4<mark>05 nm</mark>

#### **FEATURES**

- LED Powerline ACIC 410 up to 4.000 mW/cm<sup>2</sup>
- LED Powerline ACIC 820 XP up to 22.000 mW/cm<sup>2</sup>
- Small dimensions
- Low weight
- Different wavelengths available

#### **BENEFITS**

- Low temperature load
- No heating phase
- Stackable without gap
- IC (Integrated Controller) or Plug & Play with LED Powerdrive IC

**Hoenle AG** Nicolaus-Otto-Str. 2 82205 Gilching Germany

Phone: +49 8105 2083-0 curing@hoenle.com adhesivesystems@hoenle.com





Operating parameters depend on production characteristics and may differ from the foregoing information. We reserve the right to modify technical data. © Copyright Hoenle AG. Updated 09/25





# LED POWERLINE ACIC

**LED Powerline ACIC** is an air cooled high-performance UV LED array for intermediate curing (pinning), final curing for printing applications as well as curing of varnishes or UV-reactive adhesives and pottings.

**LED Powerline ACIC** is available in wavelengths of 365/385/395/405 nm +/- 10 nm. This variety allows to adjust the wavelength perfectly to any application.

**Integrated air-cooling** guarantees a reliable continuous operation over the whole ambient temperature area, without depending on huge external heat exchangers.

**For larger irradiation widths,** LED Powerlines are stackable without gap to any lengths.

The power supply and control of the LED Powerline ACIC can be done either by the optionally available LED Powerdrive IC or by an external power supply and PLC signals.

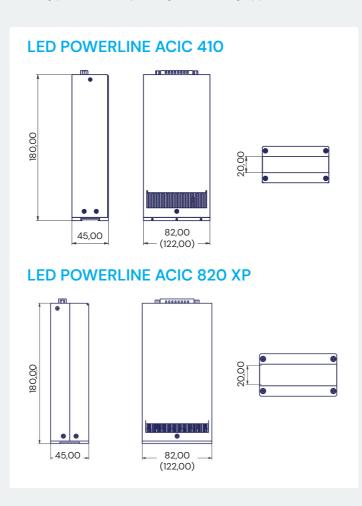
## **SPECIAL FEATURES**

- Integrated Controller
- Driving and monitoring of each LED segment
- Monitoring of LED segments regarding short-circuit, interruption and excess temperature
- Recording of the operating hours
- Analogue dimming of the segments via a 0-10 V-signal
- Digital PLC interface (LED enable, LED on, LED error)
- Bus control of all modules via RS485 or optional LED Powerdrive IC
- Focus optic available LED Powerline ACIC 410 only
- Airfilter optional LED Powerline ACIC 820 XP only

## **APPLICATIONS**

The LED Powerline ACIC 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
- Curing processes in printing and coating applications



Name	LED Powerline ACIC 410	LED Powerline ACIC 820 XP
Irradiated area / output window in mm	78 x 10 or 116 x 10	82 x 20 or 122 x 20
Dimensions in mm	78 x 29 x 150 or 116 x 29 x 150	82 x 45 x 180 or 122 x 45 x 180
Wavelength in nm	365 385 395 405	365 385 395 405
Typ. intensity in mW/cm² *	2.000 4.000 4.000 4.000	11.000 16.000 16.000 22.000
Cooling	Air cooled	
LED service life	> 20.000 hours**	

<sup>\*</sup> measured with Hoenle LED sensors for UV meter

# LED POWERDRIVE IC

**LED Powerdrive IC (Integrated Controller)** allows the independent operation of up to 3 LED Powerline ACIC. Two versions are available:

**LED Powerdrive IC 400 / 1200** can drive up to three LED Powerline ACIC 820 XP or alternatively up to three Powerline ACIC 410.

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 10 % and 100 % in 1 %-steps.

The device is recording the LED operating hours and the service menu gives comprehensive information about the current operation status.

In addition the LED powerdrive IC is characterized by the following features:

- Large and clear display with all relevant information
- Temperature / error control of LED
- Shortest cycle time (0,01 s when set on display / 100 μs in case of external activation)

## **SPECIAL FEATURES**

- Monitoring of LED segments regarding short-circuit, interruption and excess temperature
- Auto recognition of connected LED Powerline ACIC

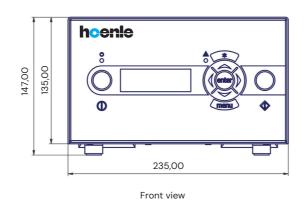
#### **INTERFACES**

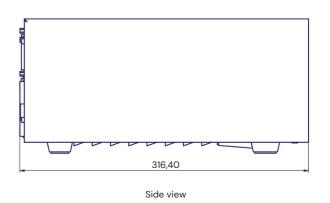
The LED Powerdrive IC has the following interfaces:

- 1V-10V \( \frac{1}{2} \) 10%-100% extended control range on request
- PLC inputs: LED on, LED enable
- PLC outputs: LED is on, LED is off, LED error, LED warning
- Dry relais contact function (see PLC outputs)
- Foot switch
- LED enable signal
- Option: Fale-safe enable (Performance level d)

## ADVANTAGES OF THE LED TECHNOLOGY

**LEDs do not emit IR radiation.** Even temperature-sensitive materials can be irradiated. The different 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.** The typical service life of a LED is longer than **20.000 hours\*\***.





<sup>\*\*</sup> typical lifetime under specified operating conditions

<sup>\*\*</sup> typical lifetime under specified operating conditions