

LED curing lamps

DELOLUX 30 Series

High intensities.
Fast curing.



DELOLUX 30 series

Highest inte

More efficiency for a variety of connections.

The new DELOLUX 30 small area lamp achieves intensities of over **25,000 mW / cm²**. Available as a single **LED head**, or as an **all-in-one solution** with control and **integrated water-cooling**, it is available in several wavelengths, including 365 nm, 400 nm and 460 nm.

With a peak intensity of over **22,500 mW / cm²**, the DELOLUX 301 LED line lamp enables maximum curing speeds with **shorter cycle times**. Flexible to use as a **single head** or in an **array**, this line lamp supports highly-automated processes in compact production lines, like those found in the manufacture of mini speakers.

The DELOLUX 30 and DELOLUX 301 are cost-efficient, reliable, and have a **service life exceeding 20,000 hours**.



Visit our website.

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nsity



25,000+

mW/cm² peak intensity

20,000+

hours of service life

DELOLUX 30 series

DELOLUX 30 and **DELOLUX 30 all-in-one** are **versatile**. With round light exit areas, these lamps are ideal for applications where a pre-determined area needs to be irradiated with adhesive.

Made for **compact production lines**, the **DELOLUX 301** features a slim design, and a rectangular light exit area, giving it the ability to be operated as an **array**.

Figure	Light exit area	Wavelength intensity working distance	Cooling
DELOLUX 30			
	Ø 23 mm	365 nm: $\geq 16,000 \text{ mW/cm}^2$ @ 2 mm 400 nm: $\geq 25,000 \text{ mW/cm}^2$ @ 2 mm 460 nm: $\geq 19,000 \text{ mW/cm}^2$ @ 2 mm	Cooling profile integrated in the lamp head, external water cooling required (liquid)
DELOLUX 30 all-in-one			
	Ø 23 mm	365 nm: $\geq 16,000 \text{ mW/cm}^2$ @ 2 mm 400 nm: $\geq 25,000 \text{ mW/cm}^2$ @ 2 mm 460 nm: $\geq 19,000 \text{ mW/cm}^2$ @ 2 mm	Closed, monitored Coldguide liquid circuit
DELOLUX 301			
	38.7 mm × 8.45 mm	365 nm: $\geq 13,500 \text{ mW/cm}^2$ @ 2 mm 400 nm: $\geq 22,500 \text{ mW/cm}^2$ @ 2 mm 460 nm: $\geq 18,000 \text{ mW/cm}^2$ @ 2 mm	External cooling profile (liquid or passive)

Control



There are three models available for controlling the DELOLUX 30 and DELOLUX 301.

DELOLUX pilot Axi offers two models suitable for **PLC process systems**. These units can supply up to two lamp heads independently of each other. With the **PROFINET** device users can transmit **more detailed information** for quality assurance and process data acquisition to the higher-level PLC.

The **DELOLUX pilot AxiT** allows manual control of up to four lamp heads, or individual operation via **PLC**, utilizing a **7" touch screen** interface.

To guarantee maximum process reliability, the basic device automatically ensures constant intensities.

All devices are designed for integration into systems with limited installation space.

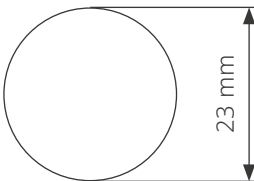
	DELOLUX pilot Axi DELOLUX pilot Axi PROFINET	DELOLUX pilot AxiT
		
Power consumption	A1i / A1i PROFINET: 400 W A2i / A2i PROFINET: 800 W	A1T: 515 W A3T: 1,140 W A2T: 825 W A4T: 1,450 W
Power specification	15 % to 100 % (increment 0.1 %)	15 % to 100 % (increment 0.1 %)
Irradiation time	0.1 s to ∞ s	0.1 s to ∞ s
Weight	A1i / A1i PROFINET: 5.0 kg A2i / A2i PROFINET: 7.3 kg	A1T: 8.0 kg A3T: 12.1 kg A2T: 10.1 kg A4T: 14.0 kg
Article numbers	DELOLUX pilot A1i: 9520300 DELOLUX pilot A1i PROFINET: 9520308 DELOLUX pilot A2i: 9520301 DELOLUX pilot A2i PROFINET: 9520309	DELOLUX pilot A1T: 9520271 DELOLUX pilot A2T: 9520272 DELOLUX pilot A3T: 9520273 DELOLUX pilot A4T: 9520274

DELOLUX 30

The DELOLUX 30 is characterized by its **peak intensity** and **homogeneous intensity distribution**, enabling faster fixation and increasing production efficiency and quality.

The LED head can be adapted to your individual requirements and **seamlessly integrated into the production line**.



DELOLUX 30	
Dimensions of lamp head	Ø 30 mm × 69 mm
Light exit area	
Wavelength / typical intensity	365 nm: ≥ 16,000 mW / cm ² @ 2 mm 400 nm: ≥ 25,000 mW / cm ² @ 2 mm 460 nm: ≥ 19,000 mW / cm ² @ 2 mm
Cooling mechanism	Cooling profile integrated in the lamp head, external water cooling required (liquid)
Control	DELOLUX pilot A series and optional PLC
Article numbers	365 nm: 9520500 400 nm: 9520501 460 nm: 9520502

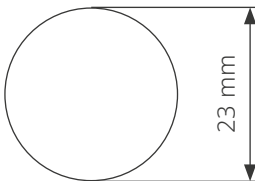
Your advantages

- › Fast fixation through maximum intensities
- › Short cycle times and increased production efficiency
- › LED heads can be easily integrated

DELOLUX 30 all-in-one

The DELOLUX 30 all-in-one includes the **permanently installed** DELOLUX pilot A1T **control module** with **integrated water-cooling** and **Coldguide** in the lamp head. You do not need any additional connections for the water-cooling system and can put the small area lamp directly into **plug & play** operation.



DELOLUX 30 all-in-one	
Dimensions of lamp head	Ø 30 mm × 95 mm
Light exit area	
Wavelength / typical intensity	365 nm: ≥ 16,000 mW / cm ² @ 2 mm 400 nm: ≥ 25,000 mW / cm ² @ 2 mm 460 nm: ≥ 19,000 mW / cm ² @ 2 mm
Cooling mechanism	Closed, monitored Coldguide liquid circuit
Control	DELOLUX pilot A1T (permanently connected) and optional PLC
Article numbers	365 nm*: 9520503 400 nm*: 9520504 460 nm*: 9520505 (* hose length 1.5 m; further hose lengths on inquiry)

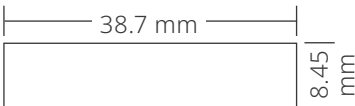
Your advantages

- › Fast fixation through maximum intensities
- › Short cycle times and increased production efficiency
- › Plug & play system with integrated water-cooling

DELOLUX 301

DELOLUX 301 offers a peak intensity of 22,500 mW / cm², enabling users to achieve maximum curing speed and **large working distances** of up to 100 mm from components. With a **linear irradiated area** in wavelengths of 365 nm, 400 nm or 460 nm, this line lamp is ideal for UV and light-curing products. It can be operated as a **single head** or linked to form an **array**.



DELOLUX 301	
Dimensions of lamp head	42.7 mm × 13 mm × 67.2 mm
Light exit area	
Wavelength / typical intensity	365 nm: ≥ 13,500 mW / cm ² @ 2 mm 400 nm: ≥ 22,500 mW / cm ² @ 2 mm 460 nm: ≥ 18,000 mW / cm ² @ 2 mm
Cooling mechanism	External cooling profile (liquid or passive)
Control	DELOLUX pilot A series and optional PLC
Article numbers	365 nm: 9520463 400 nm: 9520460 460 nm: 9520467

Your advantages

- › Fast fixation through maximum intensities
- › Linear irradiated area
- › Individual geometries thanks to seamless arrays

DELOLUXcontrol

The DELOLUXcontrol device **measures changes** in light intensity caused by aging, contamination, or distance variations between lamp heads. Different detector heads can be attached and operated. **EEPROM** technology allows quick and easy switching of detector heads and display units **without the need for extra calibration** with sensor heads.



	Display unit		Detector head	
Article	DELOLUXcontrol without detector heads	DELOLUXcontrol RS232 without detector heads	DELOLUXcontrol detector head LED 9 mm	DELOLUXcontrol detector head LED 1 mm
Features	Output of intensity, dose, max. value (peak intensity)	Integration into PLC environment via RS232 connector	Diameter of detection area 9 mm	Diameter of detection area 1 mm
Article number	9520340	9520345	9520341	9520342

Plug & play

DELOLUX lamps and their corresponding base units are designed to be plug & play. They can be integrated into production lines easily. Once connected, the base unit automatically provides all essential information about the plugged light source without requiring manual configuration beforehand. The devices are ready for use within a few minutes.

Highest quality

DELO devices are manufactured exclusively in Windach. To guarantee the highest product quality, we integrate development, production, technical testing, and support — including process simulations — at our headquarters. Our international subsidiaries, representative offices, and distributors ensure that our sales engineers provide global support.

Maximum power for optimal performance

DELOLUX 30, DELOLUX 30 all-in-one

Tail tacking in HDD production

With its 23 mm light exit area, the DELOLUX 30 is ideal for tail tacking in HDD production. The lamp's peak intensity enables a higher output and reduces production costs.



LED packaging

LED packaging allows you to position the lamp head so that the adhesive gets illuminated from above. Higher peak intensity reduces irradiation time, boosting production yield.



Automotive encapsulation processes

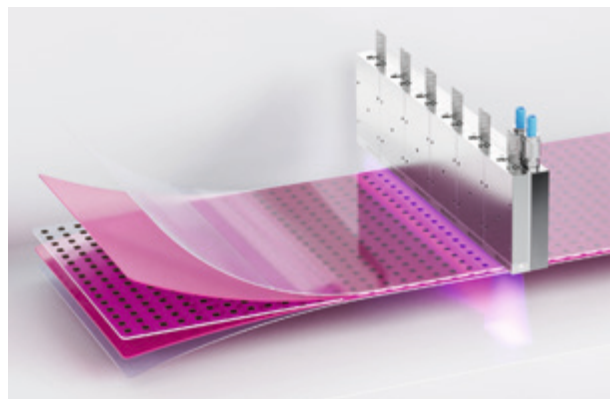
In the automotive industry, the small area lamp is ideal for chip encapsulation. It allows components to be processed after a few seconds of irradiation, improving cycle times and production efficiency.



DELOLUX 301

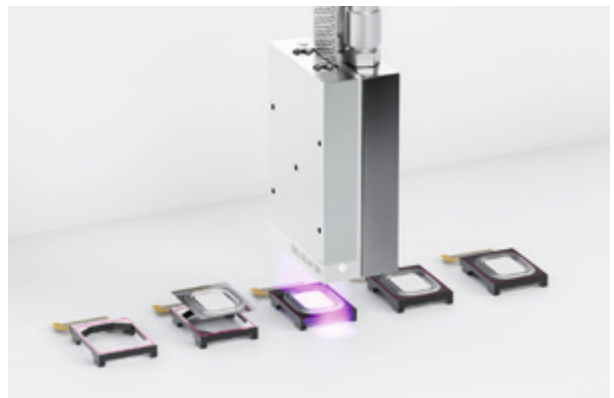
Lamination of organic photovoltaics

Organic photovoltaic cells are thin and flexible, suitable for use on various surfaces. For protection, these cells are laminated in a roll-to-roll process using films that are bonded with adhesives from the DELO PHOTOBOND LP product line. DELOLUX 301 utilizes high and consistent intensities to cure the lamination films efficiently, completing the process in a few seconds.



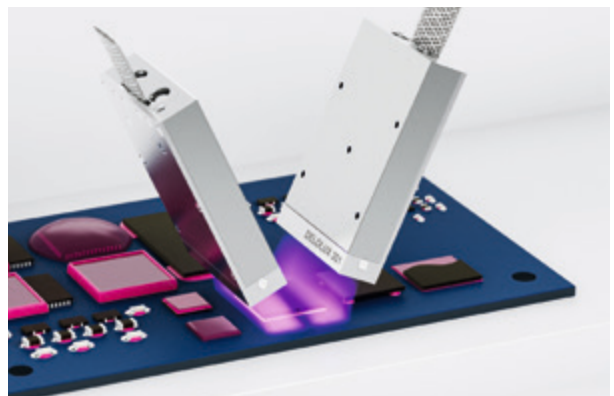
New process option for mini speakers

UV-curing DELO PHOTOBOND adhesives are used in mini speakers, such as those in smartphones, for bonding applications like attaching the membrane. Previously, large area lamps were used for curing, but the high intensities of the water-cooled DELOLUX 301 now accelerate this process.



Fillet weld exposure for ADAS sensors

RADAR sensors are essential for ADAS applications like adaptive cruise controls. They require efficient production and high precision. The DELOLUX 301, with its linear irradiation geometry, fixes sensor components by quickly irradiating the adhesive on the fillet and then curing it completely under heat.



DELO Industrial Adhesives

**China | Czechia | France | Germany HQ | Italy | Japan
Korea | Malaysia | Singapore | Thailand | USA**

The technical data is for informational purposes only. Specific values can be found in the user manual. It is the user's responsibility to test the suitability of the device for the intended purpose by considering all specific requirements. If you need support in using the devices, please feel free to contact your representative in our Sales Department.

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