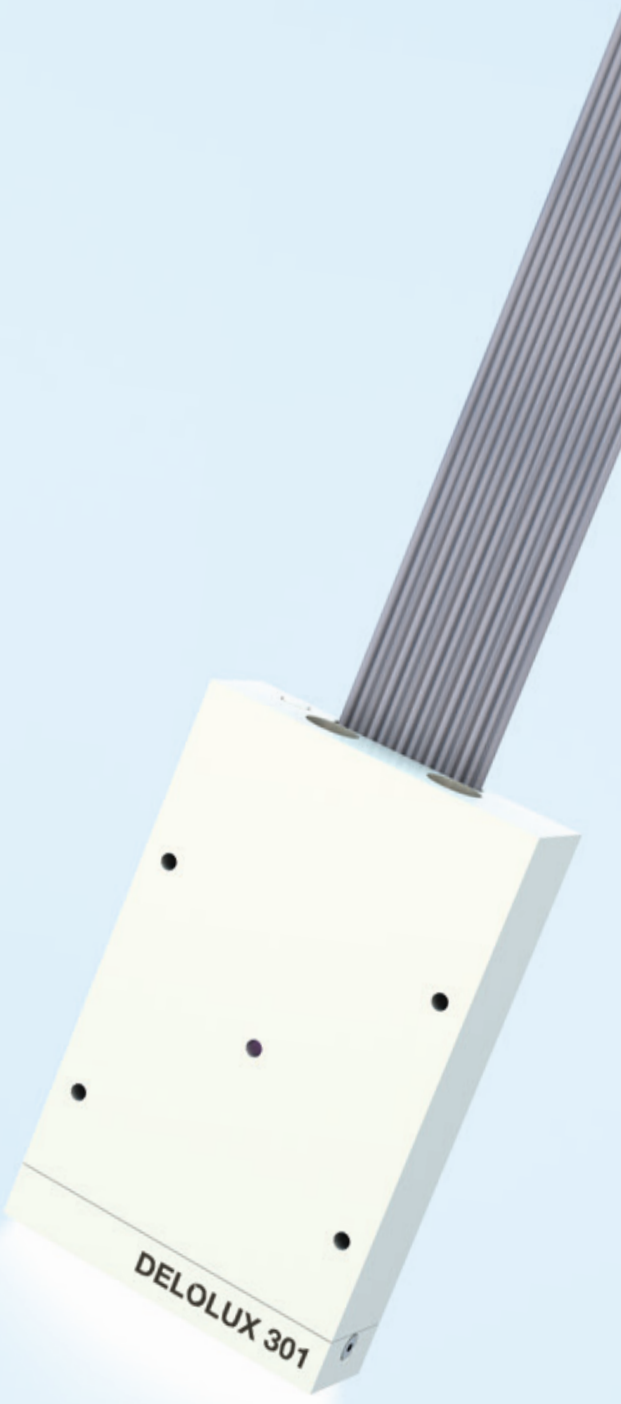
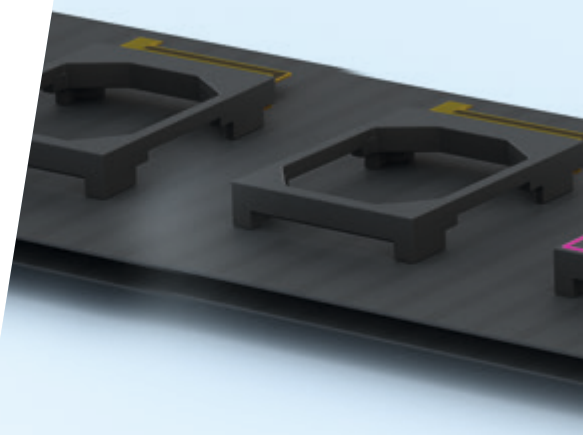
DELO

LED LINE LAMP
DELOLUX 301



LED line lamp DELOLUX 301

Highest power for narrow production lines



With its compact dimensions, the DELOLUX 301 line lamp is ideal for highly-automated processes on small and narrow production lines.

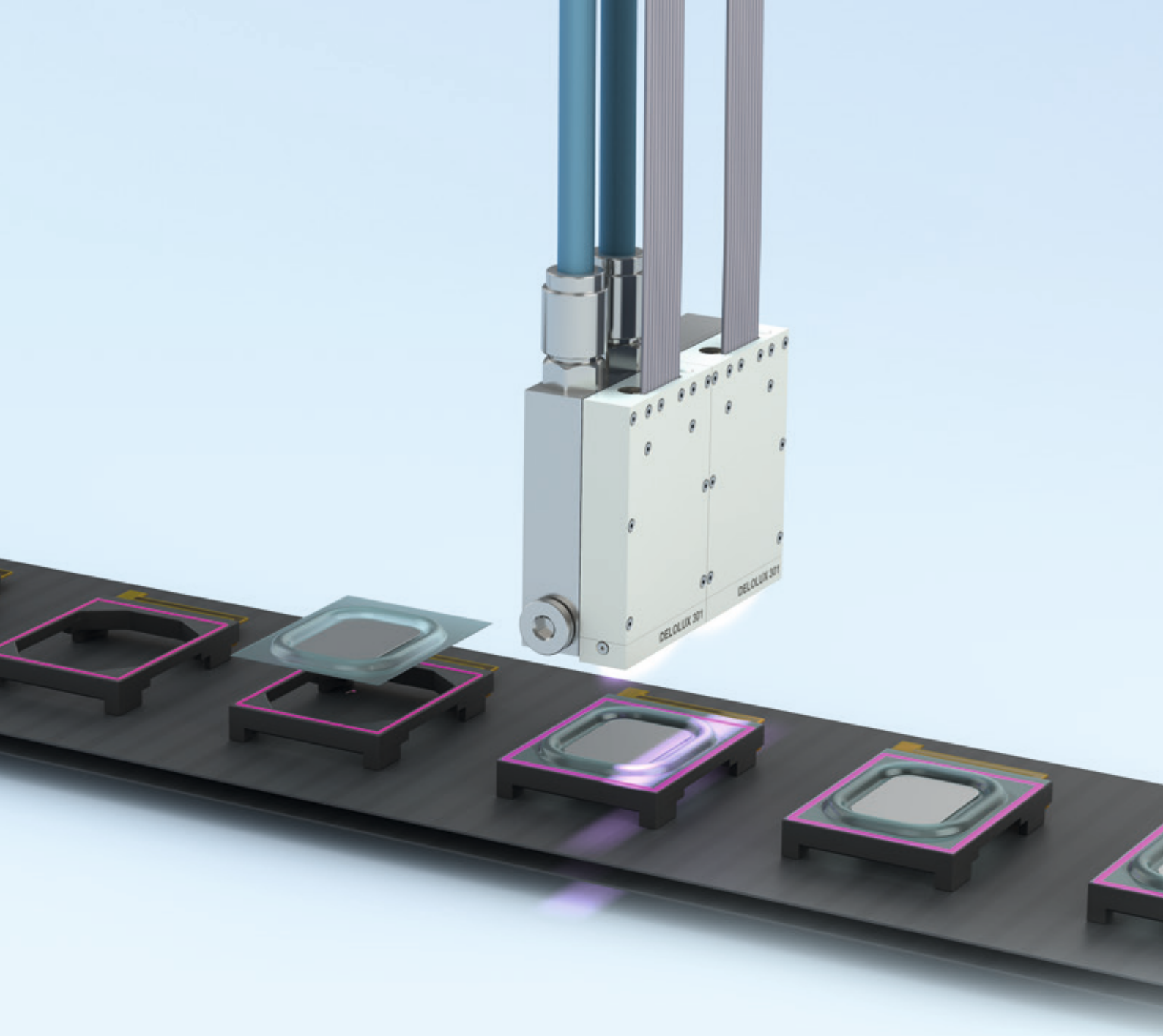
Thanks to its very high intensity of up to 30 W / cm^2, it not only enables maximum speeds for curing adhesives and other multi-functional polymers, but also allows large working distances of up to 100 mm from lamp to component, offering maximum flexibility for its integration into production systems.

DELOLUX 301 can be operated as a single head or linked to form a larger unit. With the ability to combine the lamp heads in up to three directions, users can easily implement individual as well as joint irradiated areas.

With a service life of more than 20,000 hours, DELOLUX 301 is a cost-efficient, reliable, and secure investment for any manufacturing business.

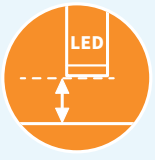
Discuss your project and your requirements with our experts:

equipment-experts@DELO.de

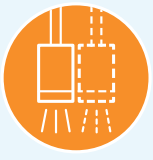


Your benefits at a glance:

› Shortest cycle times thanks to the highest intensities



› Greatest production line flexibility thanks to large working distances



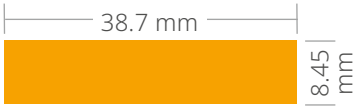
› Individual geometries through seamless arrays

Features and control

DELOLUX 301

The lamp creates a linear irradiated area, available in wavelengths of 365 nm, 400 nm, or 460 nm, suitable for UV-curing as well as light-curing products.

DELOLUX 301 is ideal for use in clean rooms and comes standard with water-cooling with optimized water flow.



	DELOLUX 301
Lamp head dimensions	42.7 mm × 13 mm × 67.2 mm
Light exit area	
Wavelength / typical intensity	365 nm: ≥ 13,500 mW / cm² @ 2 mm 400 nm: ≥ 22,500 mW / cm² @ 2 mm 460 nm: ≥ 18,000 mW / cm² @ 2 mm
Weight	280 g
Cooling mechanism	External cooling profile (water or passive)
Dimensions DELOLUX 301 heat sink water 1x1 – 0 type	42.7 mm × 16 mm × 95 mm
Material output	DELOLUX pilot Ax and optional downstream PLC
Security	Intensity measurement with DELOLUXcontrol
Article numbers	365 nm: 9520463 400 nm: 9520460 460 nm: 9520467 Heat sink: 9520462

DELOLUX 301 with control unit DELOLUX pilot AxT

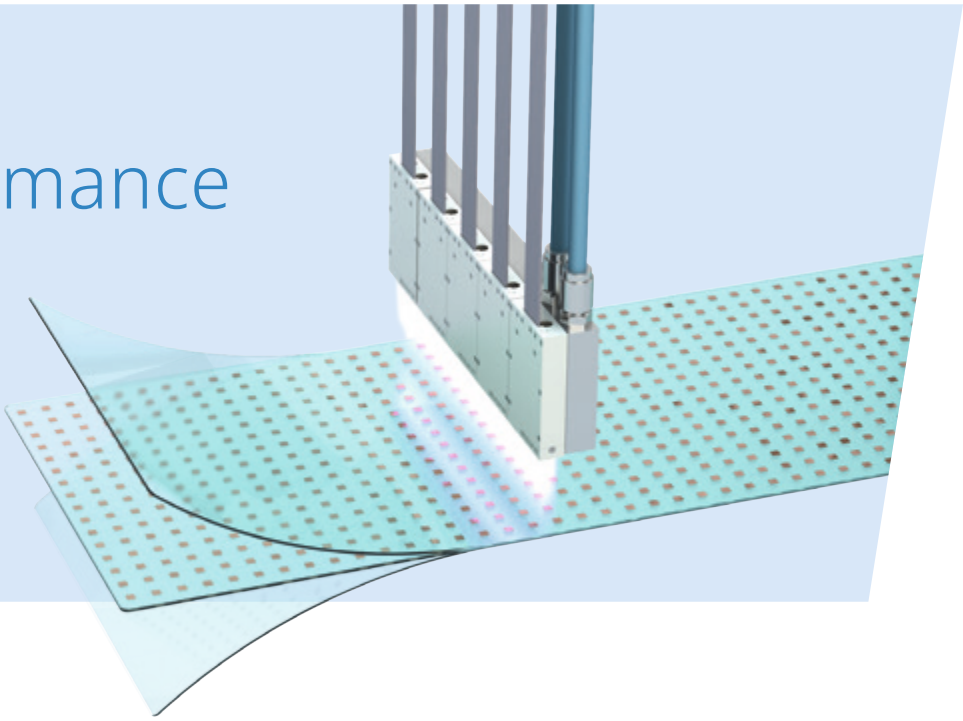
DELOLUX pilot Ax

For reliable control and power supply of these LED line lamps, you can choose between three powerful models: The two DELOLUX pilot Axi models are designed for integration into PLC-operated process systems and can supply up to two lamp heads independently of each other. The PROFINET device can also be used to send more detailed information to the higher-level PLC for quality assurance and process data acquisition. Thanks to the very fast reaction and response times, it is ideal for the Industrial Internet of Things.

DELOLUX pilot AxT enables up to four lamp heads to each be parameterized and operated, either via PLC or manually using the 7" touch screen. Its integrated power supply allows for autonomous operation, ideal for laboratories or testing environments. These compact devices are designed for easy integration in spaces that would otherwise have limited room for installation. To maximize reliability, the base unit automatically keeps light intensity at a constant value.

	DELOLUX pilot Axi DELOLUX pilot Axi PROFINET	DELOLUX pilot AxT
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 % up to 100 % (increment 0.1 %)	15 % up to 100 % (increment 0.1 %)
Irradiation time	0.1 s up to ∞ s	0.1 s up to ∞ s
Weight	A1i / A1i PROFINET: 5.0 kg A2i / A2i PROFINET: 7.3 kg	A1T: 5.7 kg A3T: 10.1 kg A2T: 7.9 kg A4T: 12.3 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

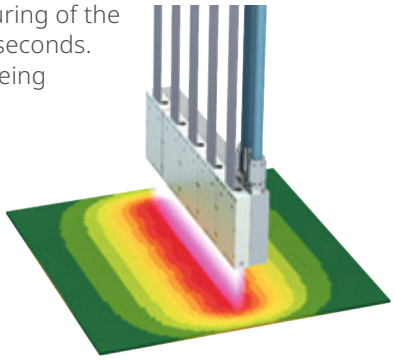
Highest performance in practice



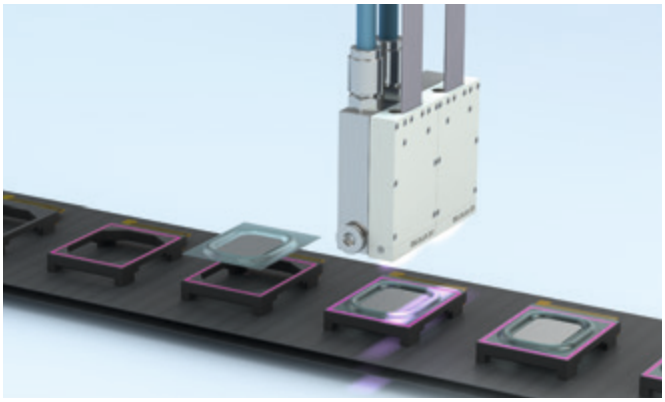
Organic photovoltaic lamination
Organic photovoltaics are very thin and extremely flexible, allowing them to be used on almost any surface. To ensure that solar cells stay functioning long-term, they are laminated with foil in a roll-to-roll process.

These often-sensitive cells, comprised of organic materials and perovskite, are protected with an appropriate adhesive such as DELO PHOTOBOND LP. For their curing, an array of several DELOLUX 301 with its linear irradiated area can be perfectly integrated into the lamination process.

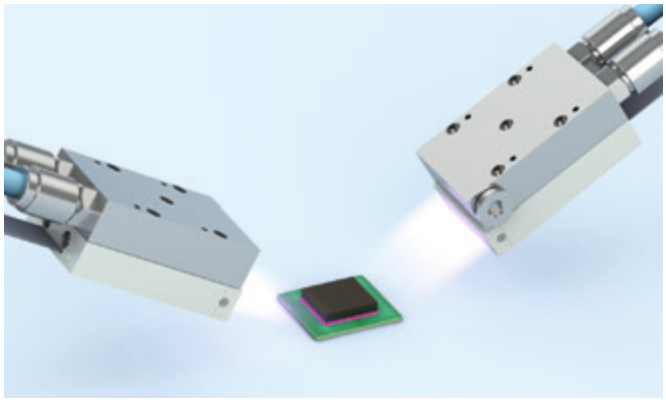
With its high intensity curing of the adhesive takes place in seconds. And with this intensity being consistently distributed through all lamps, you can expect maximum process quality and reliability.



A new curing option for mini speakers
In smaller speakers, such as those found in smartphones, tablets, or other electronic devices, there are numerous applications for UV-curing DELO PHOTOBOND adhesives, an example being attaching the speaker diaphragm to the frame. Up until now, large-area lamps have been used for curing the adhesive. Thanks to the high intensity of the water-cooled DELOLUX 301, this process is made faster and more continuous.



Fillet exposure at ADAS sensors
Radar sensors are used in many ADAS applications, such as adaptive cruise control. High production of these systems demands equally high efficiency in manufacturing. However, product precision and reliability are also compulsory. The linear irradiation area of DELOLUX 301 allows for the efficient fixation of sensor components by briefly exposing the adhesive at the fillet before subsequently reaching maximum strength under heat.



DELOLUXcontrol

The DELOLUXcontrol measuring device can be used to detect changes in light intensity that may result from aging, contamination, or changed distances between the lamp heads. It can be equipped and operated with various detector heads. The EEPROM technology used eliminates the need for additional, regular calibration of the display units with the detector heads. This allows detector heads and display units to be replaced or expanded quickly and easily.

	Display unit		Detector head	
Article	DELOLUXcontrol without detector head	DELOLUXcontrol RS232 without detector head	DELOLUXcontrol 9 mm LED detector head	DELOLUXcontrol 1 mm LED detector head
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 and Play

DELOLUX lamps and their matching base units can be integrated into production lines via plug & play. Immediately after connection, the base unit automatically outputs all important information about the plugged light source, without the need for manual configuration in advance. The devices are ready for use within a few minutes.

Highest quality

All DELO devices are “made in Windach”. To ensure highest product quality, we unite development, production, technical testing, and support (e. g. also process simulations) at our headquarters. However, wherever you are, our sales engineers are there to support you – worldwide from our subsidiaries, representative offices, and distributors.

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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 ask your contacts in our Engineering Department.

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