



# DELOLUX 20 and DELOLUX 202

LED Area Lamps



# DELOLUX 20, DELOLUX 202 and DELOLUX pilot

## The new generation in lamp technology

The LED lamps DELOLUX 20 and DELOLUX 202 enable homogeneous reliable adhesive curing. Intensities of up to 2,000 mW/cm<sup>2</sup> permit flexible use in every irradiation situation. Thanks to the compact design of the LED lamp heads, any number of modules can be placed side by side for the curing of large bonding areas.

In regular operation the LEDs built-into conventional curing lamps heat up, thus reducing the degree of effectiveness. Once the lamp is switched on, the reduced light output results in a measurable decline in intensity. Thanks to intelligent control, the new DELOLUX series compensates for this effect and ensures consistent process parameters.

The base unit DELOLUX pilot combines control and power supply of up to four lamp heads in the display version (AxT), or of up to two lamp heads in the pure PLC version (AxI). On the large 7" touch screen of DELOLUX pilot AxT, the irradiation parameters are displayed at the same time and can be set separately by the user. The display is specially designed for industrial requirements to ensure optimum readability even in adverse conditions. This allows DELOLUX pilot to be operated intuitively, even without reading the instructions, and ensures a smooth production flow.



**WATCH VIDEO NOW!**

[www.DELO.show/DELOLUX-20-202](http://www.DELO.show/DELOLUX-20-202)



DELO sets new standards by combining high irradiation intensities and easy operability, enabling us to play a leading role in efficient bonding processes.

*Dr. Karl Bitzer, Head of Product Management*





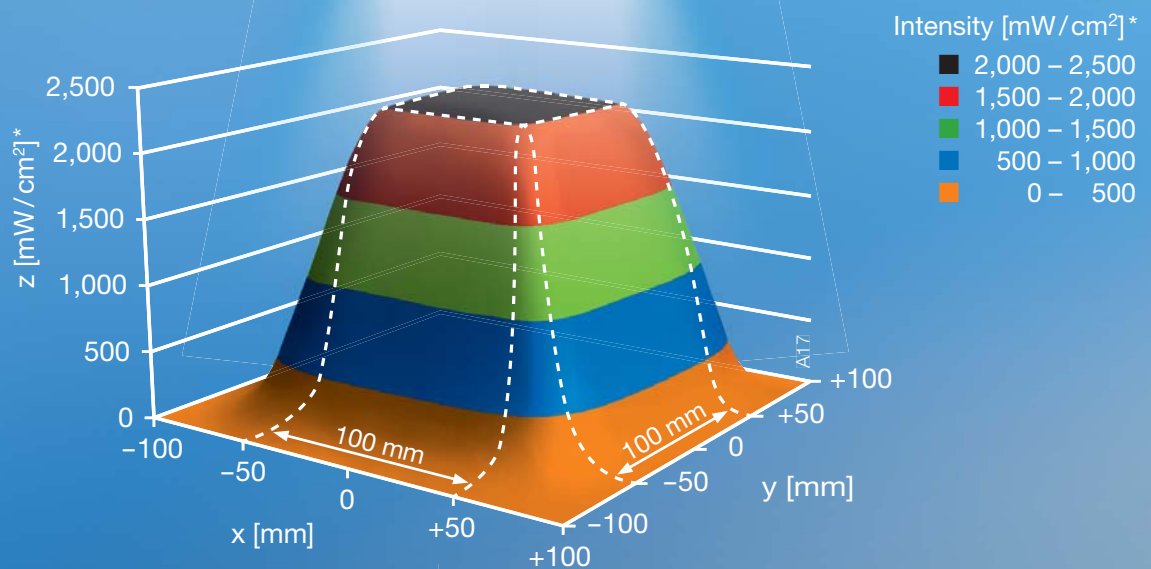
## Benefits at a glance

Features		Your benefits
Installation	<ul style="list-style-type: none"> <li>→ Easy-to-install and compact lamp heads</li> <li>→ Unrestricted expansion of the irradiated area in x and y directions, making it easy to configure large arrays</li> <li>→ Control of DELOLUX pilot via PLC and optional manual control via touch screen (DELOLUX pilot AxT)</li> <li>→ Active air cooling, therefore no external cooling unit required</li> </ul>	<ul style="list-style-type: none"> <li>✓ Plug and play</li> <li>✓ High flexibility of integration with existing systems</li> </ul>
Operation	<ul style="list-style-type: none"> <li>→ Homogeneous intensity distribution</li> <li>→ Intensity stability thanks to automated controlling</li> <li>→ Designed for continuous irradiation</li> <li>→ Highly efficient air cooling, even at high ambient temperatures</li> <li>→ Low heat development on the component (cold light source)</li> <li>→ LED technology ensures low energy consumption</li> <li>→ Operation via touch screen (DELOLUX pilot AxT)</li> <li>→ Optimal curing of photoinitiated-curing adhesives DELO PHOTOBOND, DELO KATIOBOND, and DELO DUALBOND</li> </ul>	<ul style="list-style-type: none"> <li>✓ Reliable and complete adhesive curing</li> <li>✓ Short cycle times</li> <li>✓ Irradiation of sensitive materials possible</li> <li>✓ Very user-friendly menu navigation</li> <li>✓ Low operational costs</li> <li>✓ High degree of operational safety</li> </ul>
Maintenance	<ul style="list-style-type: none"> <li>→ Achievable service life &gt; 20,000 hours</li> <li>→ LED temperature and function monitoring</li> <li>→ Statuses and messages displayed directly on screen (DELOLUX pilot AxT) or sent to PLC</li> </ul>	<ul style="list-style-type: none"> <li>✓ High process reliability</li> <li>✓ Low maintenance and spare parts costs</li> </ul>

# Homogeneous intensity



*High intensities combined with a homogeneous distribution reduce the curing time, thus increasing the number of components per hour*



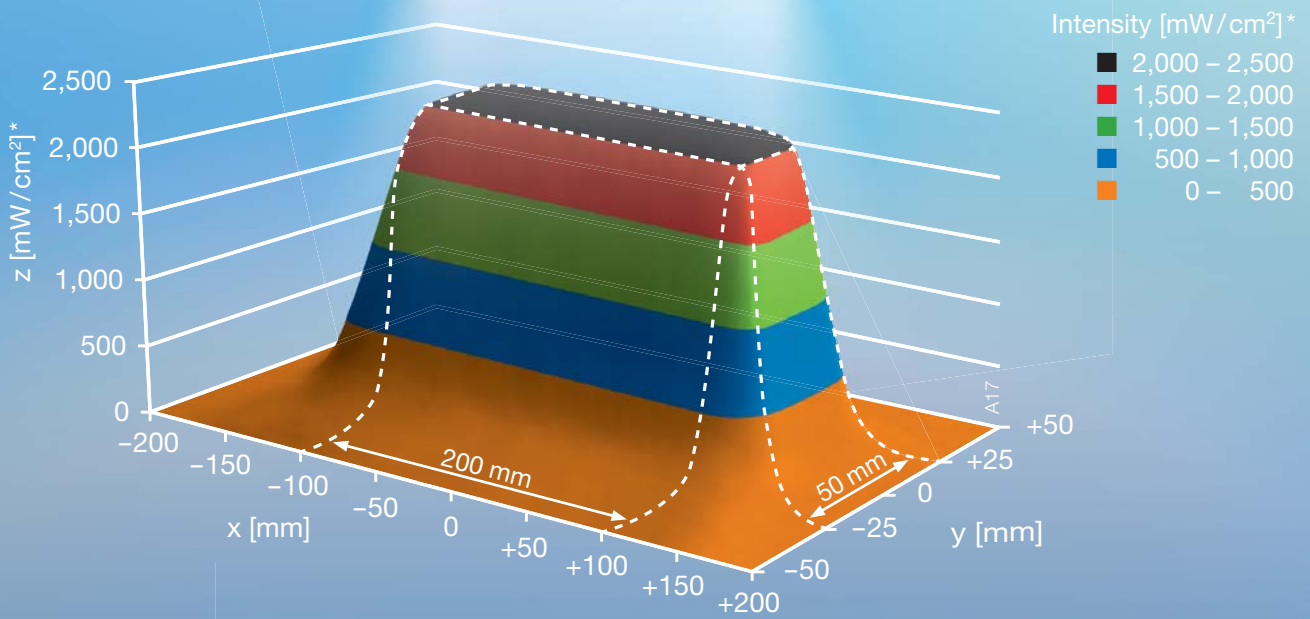
## Technical data

- Typical intensities of DELOLUX 20 and DELOLUX 202:
  - ▶ 365 nm:  $\geq 1,200 \text{ mW/cm}^2$  (A2) or  $\geq 600 \text{ mW/cm}^2$  (A1)
  - ▶ 400 nm:  $\geq 2,000 \text{ mW/cm}^2$  (A2) or  $\geq 1,000 \text{ mW/cm}^2$  (A1)
- Dimensions (L x W x H):
  - ▶ DELOLUX 20: 112 mm x 112 mm x 121 mm
  - ▶ DELOLUX 202: 209 mm x 67 mm x 121 mm
- Light exit area (L x W):
  - ▶ DELOLUX 20: 100 mm x 100 mm
  - ▶ DELOLUX 202: 202 mm x 49 mm
- Length of connecting line: 3 m (others on request)
- Weight:
  - ▶ DELOLUX 20: 1.65 kg
  - ▶ DELOLUX 202: 2.05 kg
- Power supply: via DELOLUX pilot





*A homogeneous intensity distribution over the entire irradiated area ensures uniform and low-stress curing of bonding areas*



\* Measurement at a distance of 2 mm at 400 nm



*DELOLUX 20 and DELOLUX 202:  
Arrayable in x and y directions  
without shadowed areas*

DELOLUX pilot AxT: Intelligent control and power supply of up to four lamp heads



# DELOLUX pilot AxT – Control via display and PLC



**Process control:** Irradiation parameters of up to 4 lamp heads are displayed simultaneously in the main menu and controlled via touch screen. Several user languages make the device ideally suited for international use.

## Modularity for flexibility

The base unit DELOLUX pilot controls and supplies the power to the area lamps. While DELOLUX pilot AxI\* was designed solely for integration into PLC-controlled processing systems, DELOLUX pilot AxT\* also offers additional manual controlling via a touch screen. Various versions are available depending on the quantity and intensity of the lamp heads to be controlled. This ensures that not only the weight, but also costs are kept within an optimum range.

- \* A = Area
- x = Number of controllable lamp heads
- T = Touch
- I = Integrated



**Status messages:** Various message types help the user ensure a smooth process flow by taking recommended actions.



**User management:** Modification of parameters during operation is password-protected based on assigned rights. You can create individual user profiles with distinct access rights to guarantee consistent processes.

DELOLUX pilot A1I:  
Space-saving base unit for  
easy PLC connection

# DELOLUX pilot AxI – Control via PLC

## Technical data AxT

- Controllable lamp heads:  
Maximum 4 (depending on the model version)
- Weight:
  - ▶ A1T: 5.7 kg
  - ▶ A2T: 7.9 kg
  - ▶ A3T: 10.1 kg
  - ▶ A4T: 12.3 kg
- Dimensions (L × W × H): 444 mm × 305 mm × 151 mm
- Maximum power consumption: 1.45 kW
- Integration types:
  - ▶ Table device
  - ▶ 19" rack version
- Touch screen size: 7"
- Automatic temperature compensation:  
Max. ± 2 % intensity deviation

## Technical data AxI

- Controllable lamp heads:  
Maximum 2 (depending on the model version)
- Weight:
  - ▶ A1I: 4.8 kg
  - ▶ A2I: 7.04 kg
- Dimensions (L × W × H):
  - ▶ A1I: 305 mm × 184 mm × 146 mm
  - ▶ A2I: 305 mm × 250 mm × 146 mm
- Maximum power consumption:
  - ▶ A1I: 550 W
  - ▶ A2I: 900 W
- Integration types:
  - ▶ Control cabinet
- Automatic temperature compensation:  
Max. ± 2 % intensity deviation
- Status messages via PLC and LCD display

MADE IN  
GERMANY



Like all DELO products, DELOLUX 20, DELOLUX 202 and DELOLUX pilot are developed and produced in Germany. This ensures highest quality.



Regular intensity measurements on the component with DELOLUXcontrol for quality assurance ensure long-term process reliability.



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The technical data are 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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