

The LED Flood System was developed specially for curing of Loctite® UV-adhesives with UVA- or UVV-light. It is a modular system consisting of LED head, connection cable and controller. The components have to be ordered separately. With proper handling the lifetime of the LED's is more than 20.000 hours.

The system can be operated at manual working stations as well as within automated production lines. The radiation cycle can be started with the start button at the front panel, via footswitch (included in purchase package) or via PLC.

There are two operating modes as there are timer mode and continuous mode (via footswitch or PLC connection). The unit can be operated either with timer or with continuous mode.

The LED head is equipped with 144 high power LED's with integrated reflectors for creating a uniform curing area at 380 / 405 nm wavelength. The Flood Array produces a curing area of 100 mm x 100 mm (4 inches by 4 inches). The expected life is over 20,000 hours with proper handling.

The LED Flood head (either 380 or 405 nm) needs to be selected according to the transparency of the substrate and the adhesive's spectral response.



Attributes:

- In comparison with Mercury vapor arc lamps 100% of the emitted light is within the range of the curing spectra of the adhesive.
- Each LED head has been optimized for its specific wavelength (375 nm, 405 nm, Indigo).
- Best curing distance: 50 mm.
- Large curing area: ca. 100 mm x 100 mm at 50 mm distance.
- High intensity: 190 mW / cm² at 50 mm distance.
- 100 % duty cycle possible.
- Low intensity degradation over lifetime.
- Up to 10 time's longer life time in comparison with conventional Mercury arc lamps.
- LED-heads stackable in 107 mm pattern to the side without shadow area; Controllers stackable.
- No heat up or cool down phase necessary, instant on/off possible.
- Energy efficient: High degree of efficiency of LED's, low exothermal loss.
- Nearly no head load to the work piece and adhesive during the curing process.
- Compact system with integrated cooling.
- Integrated temperature-, LED tension- and fan monitoring.

Order Codes:

Included in Delivery:

| | | | |
|--------------------------------|---------|---------|---|
| LED Flood Head | 375 nm | 1167582 | each: |
| LED Flood Head | 405 nm | 1167593 | (1) LED Flood Head |
| LED Flood Head | Indigo® | 1167589 | (1) Operating Manual |
| LED-Controller 97104 | | 1359255 | (1) Controller 97104 (1) Footswitch 97201 (1) Power Cord (1) Operating Manual (1) UV-Protection Glasses, grey 1175127 |
| Connection Cable, length 2,1 m | | 1333333 | (1) Connection Cable |

Accessories (not included in delivery):

| | | | |
|---|---------|----------------------------------|--------|
| UV-Protection Glasses, orange, 1 piece recommended for 405 nm and Indigo | 1175128 | Protection Gloves, white, 1 pair | 376746 |
|---|---------|----------------------------------|--------|

Technical Data LED Flood Head

Amount of LEDs 114 pcs. with Reflector

Radiation Area ca. 100 mm x 100 mm at 50 mm distance

Intensity typical 190 mW/cm² at 50 mm distance

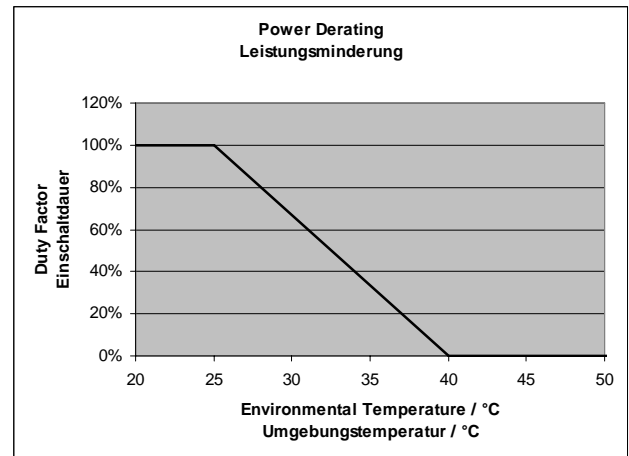
Operating Temperature +10 °C to +40 °C (+50 °F to +104 °F)

Storage Temperature - 10 °C to +60 °C (+14 °F to +140 °F)

Dimensions (W x H x D) 104 mm x 130 mm x 152 mm

Weight ca. 1.8 kg

Power Degrading



Technical Data Controller 97104

Power Supply 90 - 260 V AC, 47 - 63 Hz

Power Consumption max. 350 W

Power Connection Low-heat devices power cord IEC 320 / VDE 0625

Fuse Microfuse 5x20 mm, 5 AT, 2 pcs.

Internal Power Control 5 V DC, 24 V DC, 48 V DC

Protection Category IP 32 regarding VDE 0470, T.1 / EN 60529-1991

Protection Class I regarding VDE 0140, T.1 / EN 61140:2007-03

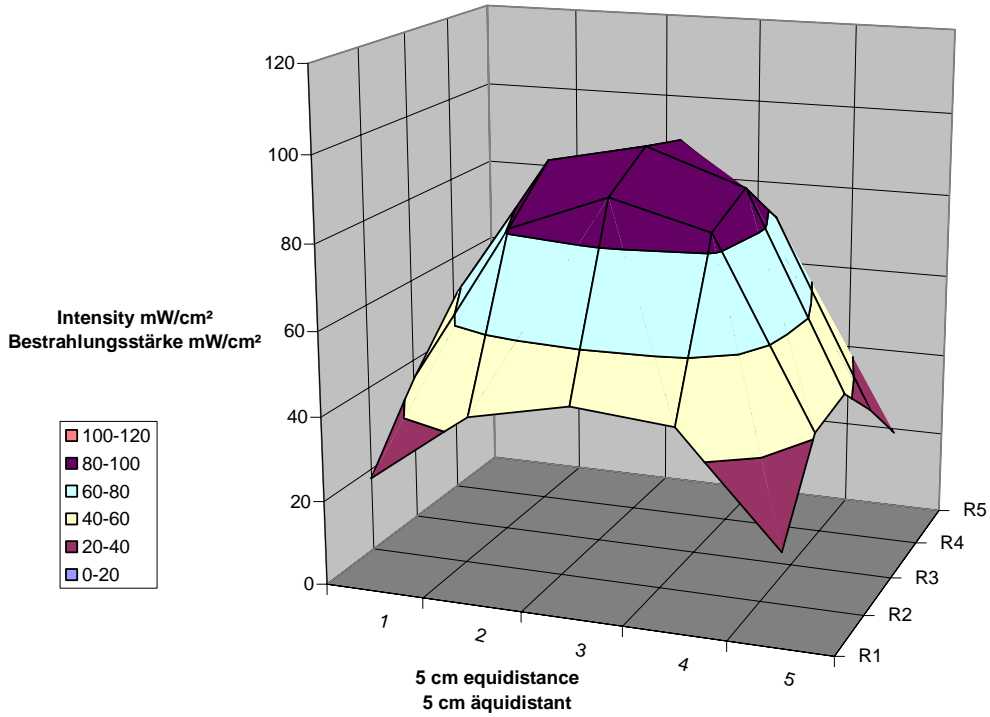
Operation Temperature +10 °C to +40 °C (+50 °F to +104 °F)

Storage Temperature -10 °C to +60 °C (+14 °F to +140 °F)

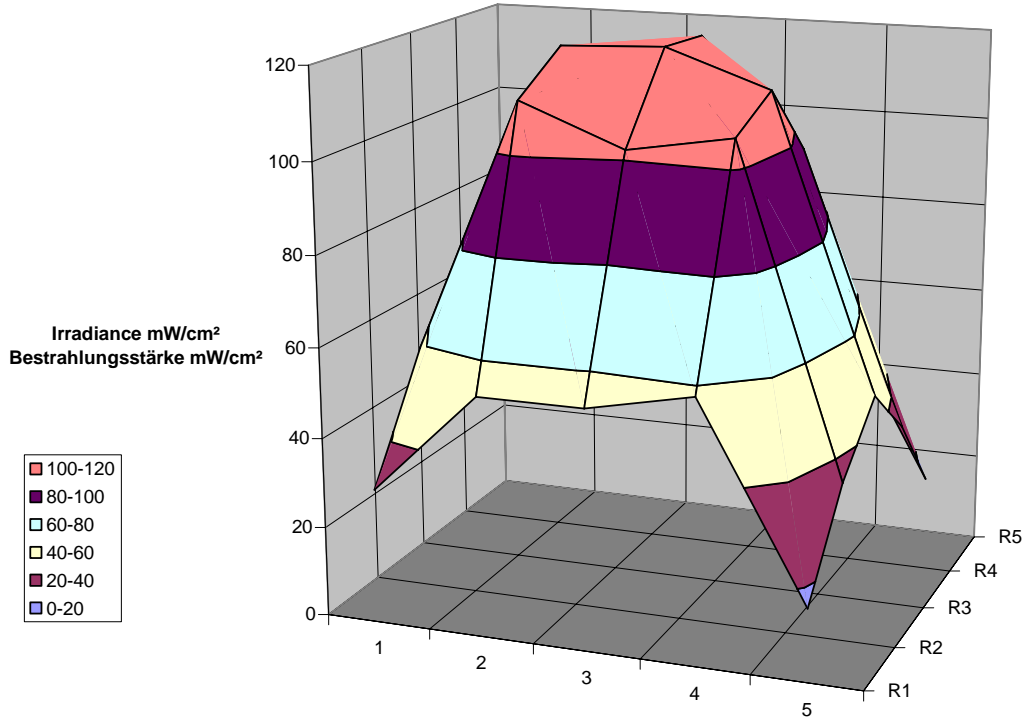
Dimensions (W x H x D) 310 mm x 135 mm x 365 mm (12.2 x 5.3 x 14.4 inch)

Weight ca. 3.7 kg

Irradiance Values of 405 nm LED Flood Light at 50 mm distance
Bestrahlungsstärke 405 nm-LED-Flächenstrahler in 50 mm Abstand



Irradiance of 405 nm LED Flood at 100 mm distance
Bestrahlungsstärke 405 nm-LED-Flächenstrahler in 100 mm Abstand



Note

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