

High-power UV-led solo P



The high-performance UV LED Solo P combines a compact, variable, and economic point light source for manual bonds in an ergonomic design. The UV LED Solo P requires no external control and can be operated directly with a mains power adapter. The UV LED is also quickly switchable.

The wavelengths of 365, 385, 395, 405, and 450 nm are available for different applications.

In addition, several beam profiles with interchangeable optics are available. The UV radiation of high-power LED is focused in the desired working distance. The high irradiance of 25,000 mW/cm² allows for short processing times.

Available optics:

- Standard for working distance 19 mm
- High power for working distance 7 mm
- Wide for working distance 55 mm
- Parallel beam for working distance 30 to 60 mm

HIGHLIGHTS

- High power UV-LED
- 365, 385, 395, 405, or 450 nm
- Highly efficient UV radiation
- No thermal radiation
- Long lifetime
- Ergonomic design

APPLICATIONS

- UV curing
- UV bonding
- UV sealing
- UV gluing
- Micro curing
- Irradiation of biological samples
- Hairline and leak detection using fluorescence markers
- Fluorescence excitation

TECHNICAL DATA

Wavelength	365, 385, 395, 405 or 450nm
Max. irradiance	> 25000 mW/cm ²
Dimensions	Ø 15 x 143 mm
Cable length	1 m
Weight	~ 130 g
Operating voltage	100 - 240 V, 50/60 Hz
Power	5 W
Classification	risk group 3 according DIN EN 62471:2009-03
Operating temperature	5 to 40 °C
Surface temperature	max 60°C ED >0,5 may require cooling
Storage temperature	-10 to 60 °C
Humidity	< 80%, non-condensing
Connection	DC in, foot switch (optional)
Button	1, (pressed = on)

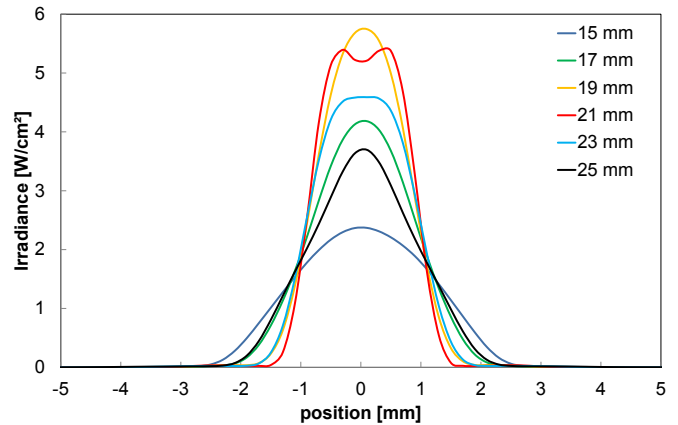
PART NUMBERS

UV-LED solo P on/off	860614
Foot switch	860611
UV safty goggles	918800
Additional optic	860605
Clamping mount	860604k
Wall plug adapter for solo P	400POW
Bend protection & extension	860604V3 (cable 3 m)
Bend protection & extension	860604V5 (cable 5 m)

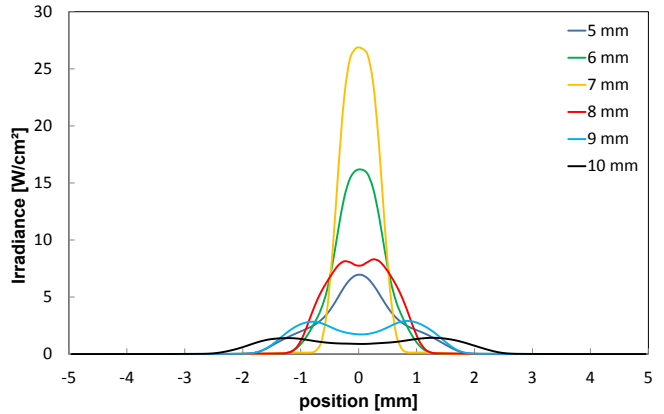
SCOPE OF DELIVERY

UV-LED solo P incl. optic, wall plug adapter

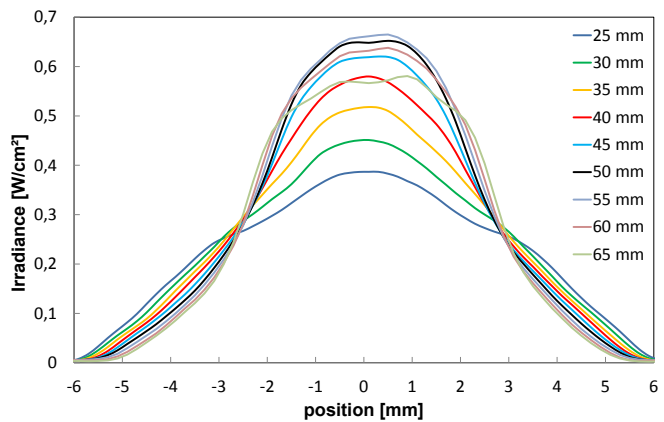
Unless otherwise stated we deliver optic „Standard“ and 365 nm. Please specify wavelenght and optic during ordering.



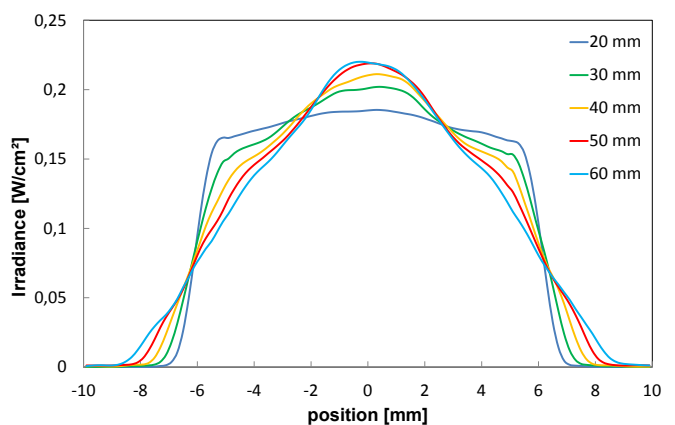
Irradiance profile vs. distance for 385 nm and optic „Standard“



Irradiance profile vs. distance for 385 nm and optic „High-Power“



Irradiance profile vs. distance for 385 nm and optic „Wide“



Irradiance profile vs. distance for 385 nm and optic“ Parallel Beam“

SAFETY

The equipment contains LEDs that emit UV-A radiation and blue light. UV radiation is invisible. The light you see is just luminescence caused by the UV. Mostly, luminescence is much weaker than the exciting UV.

UV-A light may lead to cataract formation in the eye lens and to photo-retinitis. Always use proper UV protection goggles when operating the device. The UV-A also causes pigmentation and aging of the skin. Please use proper clothing, gloves, and/or sunscreen depending on exposure. Avoid irradiating skin or eyes directly! UV irradiance in the spot is several hundred times higher than that of sunlight!

This device is classified to risk group 3 (High Risk) according to DIN EN 62471:2009-03 "Photobiological safety of lamps and lamp systems."

For protection, the operating staff should not look into the LED and should not expose their skin continuously to UV/VIS radiation.

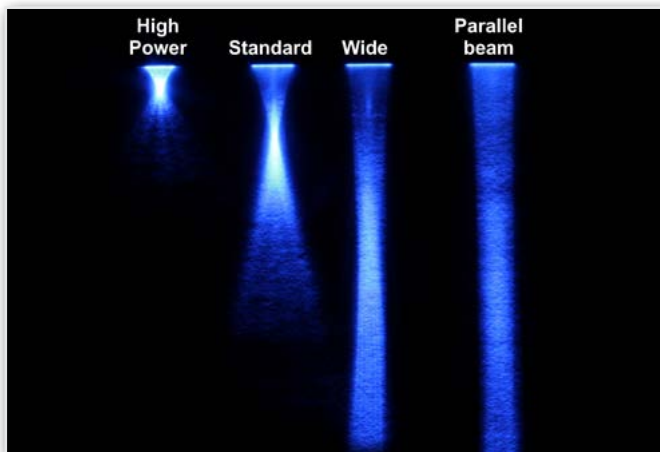
In most cases straylight from the LED application is not critical, but the job security and risk assessment must be secured by the user.

We will gladly assist you with UV job security and risk assessment according to EN 14255:2005.



BEAM PROFILES AND OPTICS OPTIONS

For the UV LED solo P four replaceable lenses are available. For small spot diameter, our optics „Standard“ and „High Power“ are best suited. Larger working distances and spot diameter can be achieved by the optics „Wide“ and „parallel beam“.

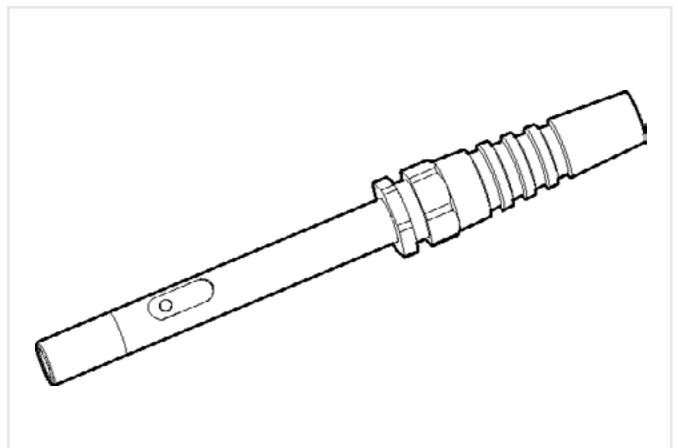


Beam profiles

EASY-TO-USE-TIPS

For the easy-to-use operation we recommend to order the optional footswitch.

A extension cable with bend protection is available for work on hard-to-reach places.



Bend protection for cable, includes extension cable