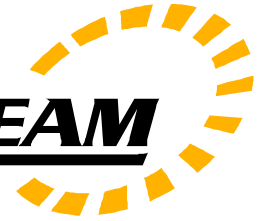


LIGHT BEAM

- spot -



*soldering system
with IR-light*



light source with power unit

- *contactless heat transfer from tool to workpiece*
- *selective reflow soldering*
- *integrated control of all soldering functions*
- *low operating costs*
- *easy maintenance*

Single point soldering with IR-light

Soldering with focused, infrared light is a high precision technology applicable at single points in the production, final assembly, or repair of 3D MID components.

The light source is a special halogen lamp with an integrated reflector and lens, which focus the emitted light at the soldering joint at the exact point where heat is needed. The soldering

temperature is realised by the absorption of the ray at the focal point. The heat distribution is precise enough to leave the periphery of the heated area unaffected.

The method is suitable for both reflow-soldering with soldering paste and for soldering wire.

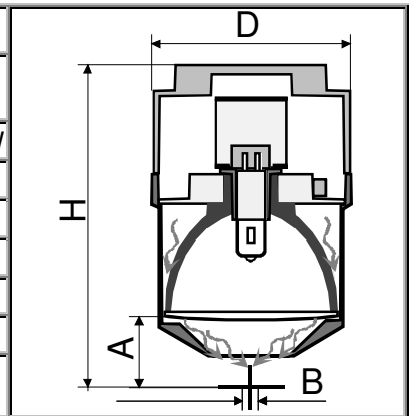
The advantages of soldering with infrared light without any periph-

eral contact are indisputable:

- no contact between tools and components
- low operating costs
- precise control of energy
- easy integration into automated applications
- easy maintenance
- easy handling

Technical data

LightSource	S250	S1000
power-input	250 W, 24 V 150 W, 15 V	1000 W, 115 V 400 W, 115 V
power output (focal point)	10 – 15 W / 8 – 10 W	30 – 35 W / 40 – 50 W
dimensions (DxH)	80 mm x 131 mm	120 mm x 200 mm
diameter of reflector	64 mm	100 mm
distance (A)	30 – 50 mm	50 – 60 mm
diameter of focal point (B)	2.5 – 3.0 mm	10 – 30 mm
wave length	500 – 1500 nm	500 – 1500 nm
durability	50 – 100 h	300 h



control unit	LBS-400	LBSP-1000
max. output power	400 W	1.500 W
µ-controller	HC05	HC05
sets of parameters (power/time)	8	8
communication	24V signals	24V signals
RS232-interface	optional	optional
dimensions (19"-case)	440 x 132 x 223 mm (3 HE x 84 TE)	440 x 132 x 223 mm (3 HE x 84 TE)

Technical description of *LightBeam-spot*

The LightBeam spot is a light soldering system designed for integration into automatic production systems. It consists of a light source, control and power unit.

The light source is a 250 W halogen lamp, which issues a light beam with wavelengths of 500-1500 nm. The lamp is surrounded by an ellipsoid reflector, which focuses the emitted light at the soldering point precisely where the heat is needed.

The soldering point has a spot-diameter of 2.5-3.5 mm with a focal length of 40 mm from the optical system. At this distance, the unit is positioned. With a starting power of 250 W (or optionally 150 W), the ray reaches a soldering power of 10-15 W at the focal-point.

With low voltage in standby mode, which switches on automatically, the durability of the light source is maximised.

The integrated microcontroller permits the control of all functions with only one input signal. The parameters can be modified by a menu LED display or by using the RS232-interface. The control unit also allows for the computing of a program. Optionally, the system can be expanded to include temperature regulation by means of a pyrometer and evaluation unit.