

SL 400 MICRO WELD High Energy Lasers

High energy. Flash lamp pumped. Fiber coupled.

The flash lamp pumped SL 400 MICRO WELD is designed for maximum flexibility using one or two industrial grade high power fibers that allow to go basically anywhere with the processing head. The air cooled system comes with adjustable pulse energy and repetition rate up to 2 Hz and a compact processing head including a state of the art vision system

that is available as an option. Based on the field proven SpitLight Series the SL 400 MICRO WELD comes with long life flash lamps and detachable, armored delivery fibers for fast connection with optionally available imagers, collimator modules or commercially available beam delivery packages.

Applications

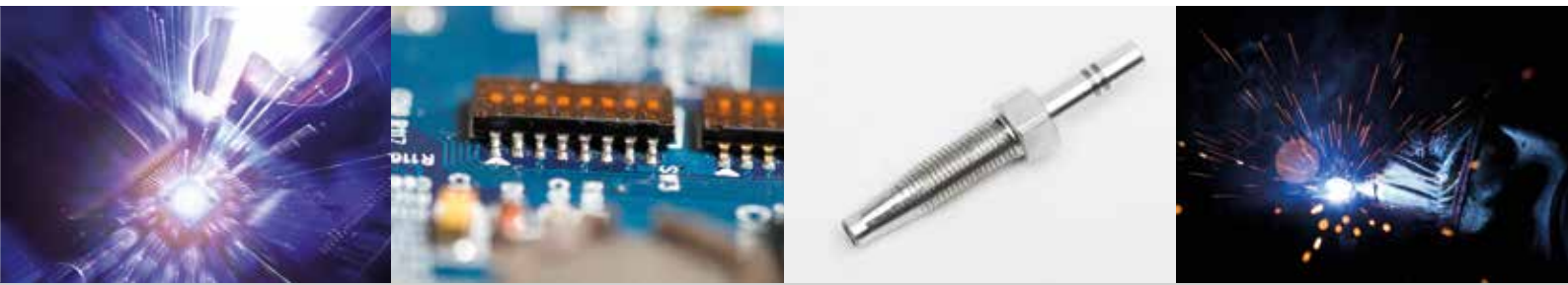
- * Industrial Manufacturing
- * Spot Welding
- * Seam Welding
- * Brazing & Soldering
- * Scientific

Features

- * Modular industrial design
- * Single or dual fiber output
- * Adjustable pulsewidth
- * Long life flash lamp pumped
- * Processing head including vision system



(i) The more the better: 8 Joules of raw pulse energy delivered by one or two high power industrial grade fibers. This is the SL 400 MICRO WELD. As the name implies this laser is the perfect choice for demanding micro welding applications where high pulse energy is the key to perfect welding joints.



Specifications

Model	MICRO WELD	MICRO WELD DUO
Wavelength	1064 nm	1064 nm
Nominal Power	7 W	2 x 4 W
Pulse Energy	7 J @ 1 Hz	2 x 4 J @ 1 Hz
Pulse Width	2-10 ms	2-10 ms
Peak Power	up to 3.5 kW @ 1 Hz	up to 2 x 2 kW @ 1 Hz
Fiber Core Diameter	200 µm	200 µm
Fiber Numerical Aperture	< 0.22	< 0.22
Fiber Connector	SMA 905	SMA 905
Fiber Type & Length (standard)	Industrial Armored, 3 m	Industrial Armored, 3 m
Warm-up Time	< 20 min	< 20 min
Operating Voltage	230 VAC ± 10%, 50-60 Hz, single phase	230 VAC ± 10%, 50-60 Hz, single phase
Laser Power Consumption	< 500 W	< 500 W
Cooling	Water-to-Air	Water-to-Air
Ambient Temperature	15-30 °C (59-86 °F), non-condensing	15-30 °C (59-86 °F), non-condensing
External Control	TTL and Analog Control	TTL and Analog Control
Dimensions Laser Head (L x W x H)	449 x 125 x 139 mm (17.68 x 4.92 x 5.47 in.)	449 x 125 x 139 mm (17.68 x 4.92 x 5.47 in.)
Dimensions Power Supply (L x W x H)	693 x 483 x 260 mm (27.28 x 19.02 x 10.24 in.) 19" system, 6 RU high	693 x 483 x 260 mm (27.28 x 19.02 x 10.24 in.) 19" system, 6 RU high
Weight Laser Head	15 kg (33.1 lbs.)	15 kg (33.1 lbs.)
Weight Power Supply	30 kg (66.1 lbs.)	30 kg (66.1 lbs.)

InnoLas follows a policy of continuous product improvement. All specifications are subject to change without notice. Rev. 1.2, 06/2015.
InnoLas Photonics GmbH is DIN EN ISO 9001 certified.

Technical Drawing

Laser Head

