

■Features

- High output power of 75 W with 107 μm core diameter optical fiber
- Air cooling

■Applications

- Glass-ceramic bonding
- Soldering
- 3D printer
- Micro laser welding (fine metal wire and this metal sheet)

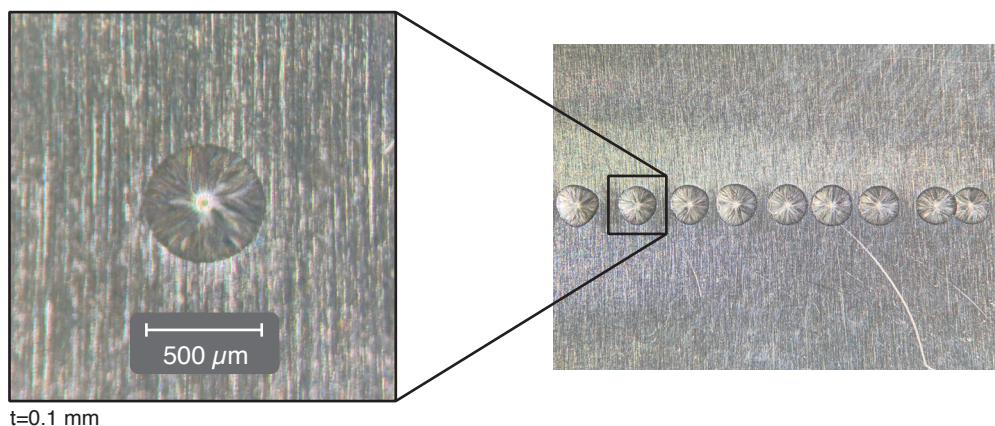


■Outline

This is an LD irradiation light source capable of outputting 75 W laser light with 107 μm optical fiber core diameter. High power density laser light is realized because of its micro spot and high power, enabling metal welding etc.

Figure 1: Fine metal welding (example)

Material: SUS304



LEF5B0005

SPOLD® LD Irradiation Light Source L13920-130

General ratings

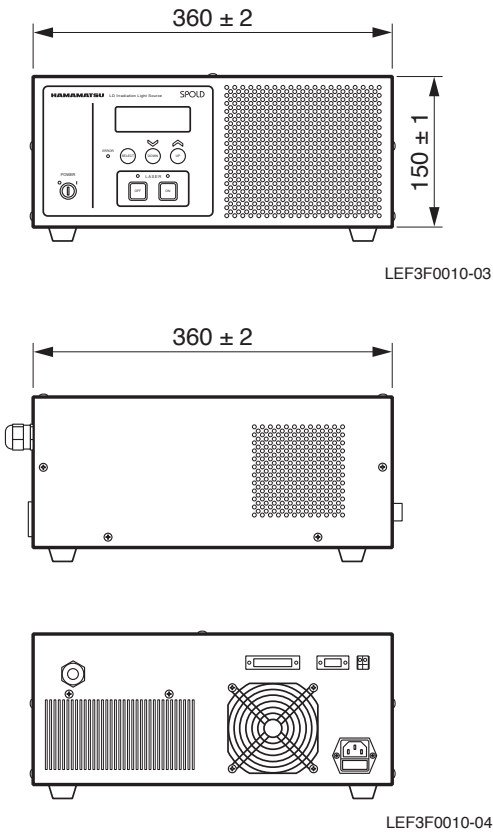
Parameter	Value	Unit
Operating temperature *1	+10 to +30	°C
Storage temperature *1	0 to +50	°C
Storage and operating humidity *1	≤60	%
Place of use	Indoor at an altitude of ≤2000 m	—

*1 No condensation

Specifications

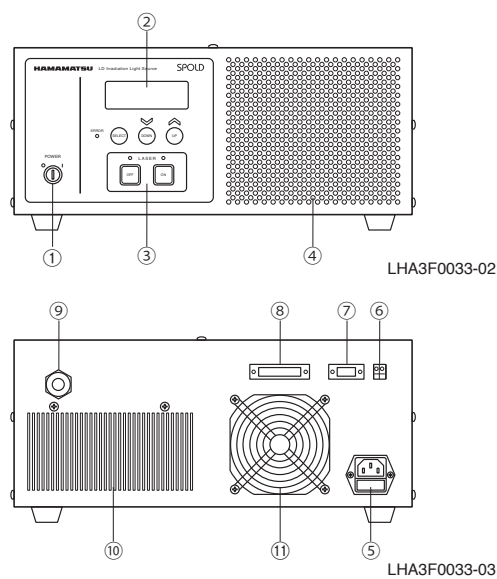
Parameter		Specification	Unit
Radiant power (with maximum current setting)		75 (min.)	W
Oscillation type		CW	—
Peak emission wavelength		915	nm
Cooling method		Air cooling	—
Red guide light		Not available	—
Control unit	Safety function	Interlock	—
	External control	External control terminal (D-Sub 25 pin)	—
Dimensions (W × H × D)		360 × 150 × 360 (excluding protrusions)	mm
Weight		Approx. 14	kg
Laser transmission optical fiber	Core diameter	107	μm
	Fiber length	Approx. 5	m
Irradiation unit	Type no.	A12803 series	—
	Condensing diameter	φ0.1, φ0.2	mm
	Working distance	Approx. 50 or Approx. 100	mm

Figure 2: Dimensions (unit: mm)



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Figure 3: Name and function



No.	Name	Functions and applications
①	Power switch (key switch)	Switching ON/OFF the power of the light source main unit
②	Display panel	Display LD current and LD installation point's temperature, blink when an alarm is issued
③	Operation switch/indicator lamp	Control and display laser irradiation
④	Air inlet	Inlet air for LD cooling
⑤	AC inlet (open device)	Power cable inlet, built-in fuse (GND should be securely connected)
⑥	Interlock terminal	Laser irradiation stops when these terminals are opened
⑦	Serial communication terminal	Not used, for maintenance
⑧	Laser external control signal input terminal	Input/Output terminal for laser external control
⑨	Laser transmission optical fiber outlet	Laser transmission optical fiber fixing port
⑩	Air outlet	LD cooling air outlet
⑪	Cooling fan outlet	Air outlet of radiator fan

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- Information described in this material current as of June 2025. Specifications are subject to change without notice.

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