

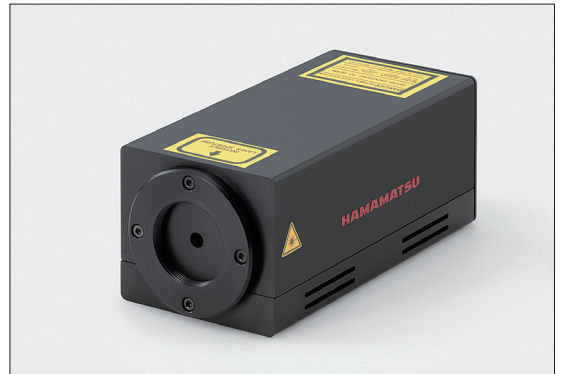
■ Features

- 8 mJ@10 Hz
- Small size, lightweight, high peak power
- Low power consumption
- All-in-one type ideal for embedding in system
- Single shot to 10 Hz operation is possible

■ Applications

- Spectroscopy (LIBS *1)
- Surface modification of materials (laser peening, scribing)
- Ablation processing (drilling, repair)

*1 LIBS: Laser Inducted Breakdown Spectroscopy



■ Outline

This is a cost-effective, high peak power pulsed solid state laser with the laser driver in the same package. L15438-01 needs only 24 V DC power supply and trigger signal for operation.

■ General ratings

Parameter	Value	Unit
Operating temperature	+20 to +40	°C
Storage temperature	-10 to +50	°C
Operating / Storage relative humidity *1	70 or less	%
Installation location	Indoors (altitude up to 2000 m)	—

*1 No condensation

■ Specifications

Parameter	Specification	Unit
Wavelength	1064	nm
Pulsed energy	8	mJ
Repetition frequency	Single shot to 10 *1	Hz
Pulse width	<2	ns
Average power	>80	mW
Cooling	Air cooling	—
Input power	DC +24 V / Max. 2 A	—
Current consumption	2 (Max.)	A
Dimensions (W × H × D)	75 × 65 × 155 (excluding protrusions)	mm
Weight	Approx. 1	kg
Laser class	3B	—

*1 When a trigger signal is input from an external source via TTL, laser is output in the range from single shot to 10 Hz.

Pulsed Solid State Laser L15438-01

Figure 1: Dimensions (unit: mm)

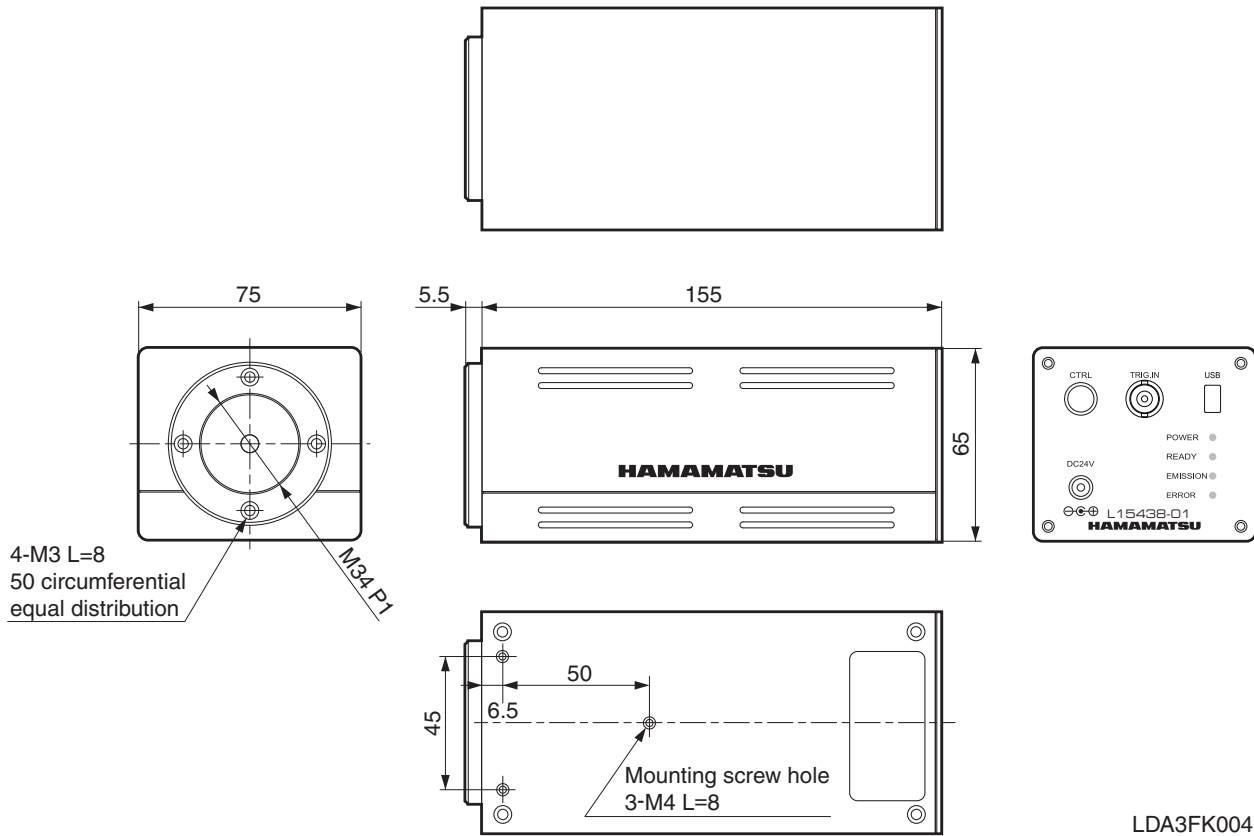
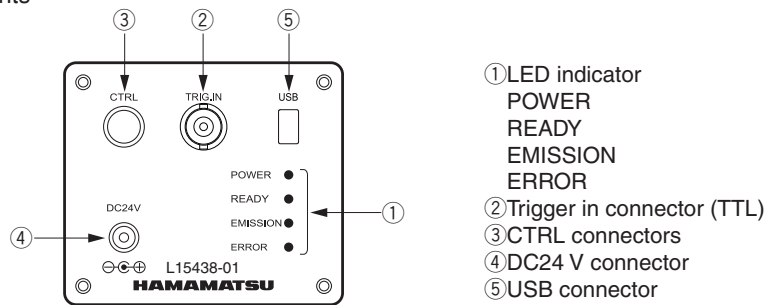


Figure 2: Rear panel components



* ⑤ USB connector is for maintenance. Cannot be used.

LDA3FK005

Warning (Class 3B Laser)

Invisible laser radiation: Avoid exposure to beam

● The laser radiation emitted from this product is an invisible laser beam that cannot be seen by the human eye. This product falls within "Class 3B Laser" according to IEC 60825-1 laser product classification. Always comply with IEC 60825-1 safety standards when using this product.



* This product is intended for incorporation into laser processing equipment and does not meet IEC 60825-1 requirements. When outputting laser, take appropriate safety measures such as preparation of protective enclosure or interlocking in case the protective enclosure is opened to prevent human body from laser beam and scattered light. Also, the end-product incorporating this product must comply with IEC 60825-1 standards.

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