



Operation Instructions & Main Technical Index of 100 μ J Eye-safe Laser

1. Important Notice

Along the emission direction of the laser, the left side acts as the positive electrode and the right side is the negative electrode, with a direct voltage of about 1.8 V and a fixed drive current of 7.5 A. Pulse drive current width in low temperature and normal temperature varies between 1.2 - 1.5 ms and increases with temperature, reaching 1.8 -2.0 ms at 65 °C; however it never gets higher than 2.5 ms.

2. Operating Steps

(1) Take out the laser and remove the short circuit between the positive and negative electrode; when soldering the electrode wire, the temperature of the soldering iron should not exceed 320 °C, and the soldering time should be as short as possible (the soldering iron should heat the wire first, and the solder should be melted and then soldered to the electrode).

(2) Connect the positive and negative current inputs of the laser to the two electrodes of the drive lines when the drive line is off.

(3) The laser starts emitting once the drive line begins to work.

3. Precautions

(1) The power supply of the laser is 1.8 V. To prevent static electricity from penetrating the LD of the laser, please short circuit when not in use.



(2) The operating current on the laser should never exceed 7.5 A.

Before connecting the laser to the driver circuit, be sure to confirm the output current amplitude and width. The drive width starts from 1.2 ms or so, not too wide to prevent the laser from being damaged.

(3) Be careful to avoid reflections back into the laser, in order to avoid optical damage.

Appendix-Main Technical Index and Parameters of 1535-20kW

Part No.	1535-20kW
Item	Optical Property
Wavelength	1535 nm
Pulse Repetition Frequency	1-10 Hz
Pulse Width	4.6 ns
Peak Power	≥20 kW
Beam Diameter	0.17 mm
Beam Divergence	10 mrad
Dimension	27 mm×10 mm×9 mm
Weight	8 g
Working Temperature	-4 °C ~ 65 °C
Storage Temperature	-5 °C ~ 70 °C

