**R** ERDI LASER<sup>®</sup>

#### 800µJ 1535nm Eye-safe DPSS Erbium Glass Laser Model:ER800

## **₽ PRODUCT DESCRIPTION**

The 1535nm erbium glass laser functions within a wavelength that is safe for the eyes, making it highly beneficial for use in laser ranging and radar systems. This laser series features pulses that are clean and devoid of tails, with consistent single-pulse energy and outstanding beam quality. Its design integrates a semiconductor pumping module and laser crystal, and comes in a compact, streamlined package that simplifies installation and integration. Notably, it can produce a maximum output energy of up to 800µJ.



## **raching technical specifications**

Laser Wavelength	1535 nm
Eyesafe	Class 1
Pulse energy	≥800µJ
Laser Pulse width	8 ns
Pulse repetition rate	1~10Hz
Pulse stability	10%
Raw Beam Diameter	0.4mm
Beam divergence angle	7 mrad
Beam Mode	$TEM_{00}$
Energy Stability (RMS)	3%
Operating temperature	-40 °C~+65 °C
Storage temperature	-55 °C~+80 °C
Impact	1500 G, 0.5 ms
Vibration	20~2000 Hz/20 G
Life span	>5 million times
Dimension (mm)	40x9x7.7
weight	20g
Voltage	2 V
electric current	30 A
Drive pulse width	≥1.8ms

**R MECHANICAL DIMENSION**(mm)







Spot shape

RDI LASER®

### **PART NUMBERING SCHEMA**



## $\square$ PIN DESCRIPTIONS

Pin	Function
1	Laser (+)
2	Laser (-)

# $\blacksquare$ INSTRUCTIONS FOR USE

- > When operating the laser, avoid direct laser exposure to eyes and skin.
- Anti-static measures must be taken during transportation, storage, and use.
- > The laser's leads should be connected using welding.
- > The welding point should be as close as possible to the base of the pin.
- > The welding temperature should be below 260°C, and the welding time should be less than 3 seconds.
- > The laser should be used at its rated current.
- > Ensure proper heat dissipation when the laser is operating.
- > Operating temperature range:  $-40^{\circ}$ C to  $+65^{\circ}$ C.
- Storage temperature range:  $-55^{\circ}$ C to  $+80^{\circ}$ C.

