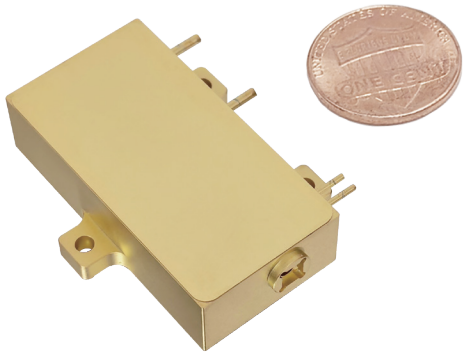
1.5~2mJ 1535nm Erbium Glass Lasers



RealLight' s 1535nm Erbium glass lasers operate in the eyesafe wavelength regime, have great advantages in applications including laser ranging and LiDAR. This series of lasers feature no tail pulse, stable pulse energy and excellent beam profile. The integrated design of diode-pumped module and laser crystal brings convenience to installation and integration due to the compact size. The output power of this series is up to 2mJ.

Key Features

- Passively Q-Switched, Er: Glass
- Eye-safe
- Extremely light
- Super compact design
- Wide operating temperature range

Applications

Laser rangefinder

Meteorological radar

Technical Specifications

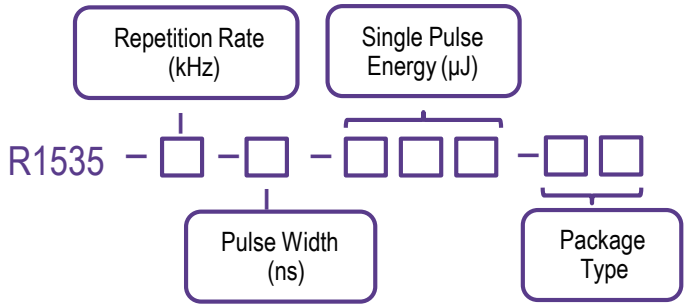
Wavelength (nm)	1535		
Single pulse energy (mJ)	2	2	1.5
Repetition rate (Hz)	1	5	10
Pulse width (typ., ns)	10		
Pump pulse width (ms)[1]	≤3		
Energy Stability (RMS)	3%		
Beam diameter (typ., mm@1/e^2)	0.45		
Beam full divergence (mrad)	≤5.5		≤6
Beam profile	TEM_{00}		
PIN amplitude (typ., V@50Ω resistance)	3		
Operating current (typ., A)	70		
Operating Voltage (V)	4		
Dimensions (L×W×H,mm)	49.5x25x12		
Weight (g)	100		
Operation temperature (˚C)	-40~65		
Storage temperature (˚C)	-45~80		
PD output signal	built-in photodiode		

1. Pumping pulse width at full temperature: ≤3.5 ms.
2. All the data in the above table are the typical values obtained from the tests at room temperature of 25˚C, and the final data is subject to the final test report.

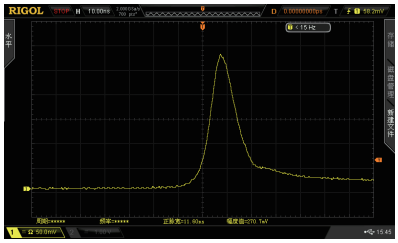
Order Information

Wavelength (nm)	Part Number	Repetition rate (Hz)	Pulse width (ns)	Single pulse energy (μJ)	Dimensions (mm)
1535	R1535-0.001-10-2000-F11B	1	10	2000	49.5x25x12
	R1535-0.005-10-2000-F11B	5	10	2000	
	R1535-0.01-10-1500-F11B	10	10	1500	

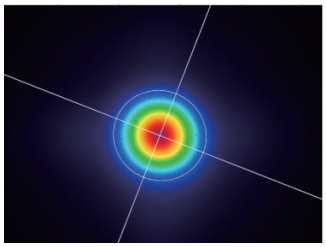
Part Numbering Schema



Product Characteristics Diagrams

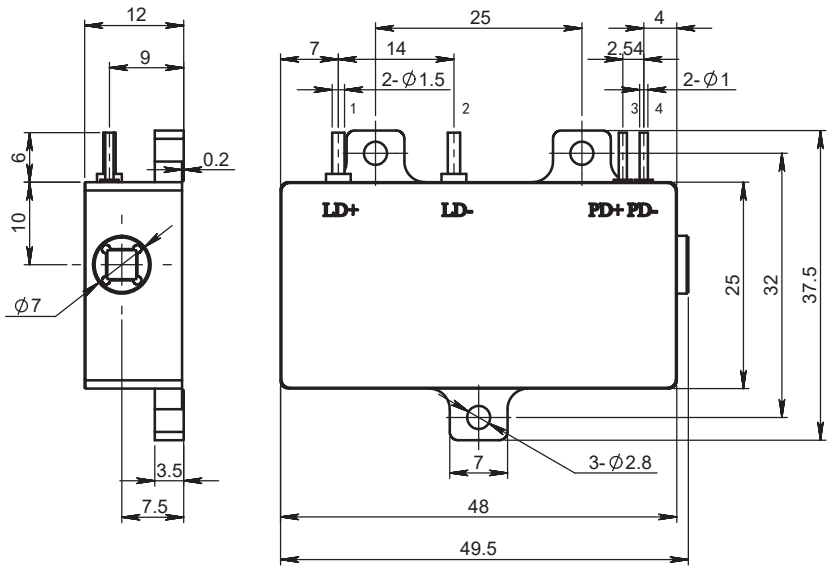


Typical Pluse



Beam Profile

Mechanical Drawings (in mm)



F11B Drawing