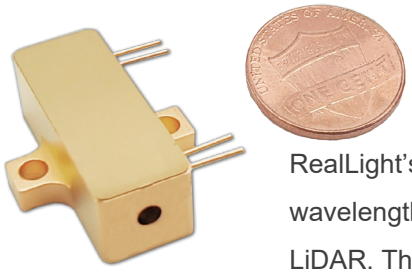
1535nm 100~300μJ Erbium Glass Lasers with PIN



RealLight's 1535nm Erbium glass lasers with photodetector (PIN) operate in the eyesafe wavelength regime, have great advantages in applications including laser ranging and LiDAR. This series of lasers are equipped with integrated photodetector (PIN), providing PD output signal, 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.

Applications

Laser rangefinder

Meteorological radar

Key Features

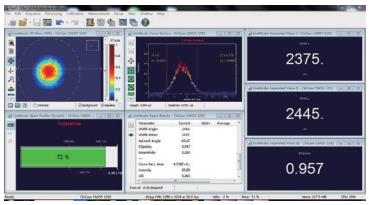
- Integrated PIN, provides PD output signal
- Passively Q-Switched, Erbium Glass
- Eye-safe
- Extremely light

Technical Specifications

Wavelength (nm)	1535		
Pulse energy (μJ)	100	200	300
Repetition rate (Hz)	10		
Pulse width (typ., ns)	3	4	4
Energy Stability (RMS)	3%		
Beam full divergence (mrad)	≤11	≤10	≤9
Beam profile	TEM_{00}		
PIN amplitude (V@50Ω resistance)	2~3		
Operating current (A)	8	8	12
Operating Voltage (V)	2		
Dimensions (L×W×H,mm)	25x8x7		
Weight (g)	10		
Operation temperature (℃)	-40~65		
Storage temperature (℃)	-45~80		

All the data in the above table are the typical values obtained from the tests at room temperature of 25℃, and the final data is subject to the final test report.

PIN signal and amplitude



Beam Profile

Order Information

Wavelength (nm)	Part Number	Repetition rate (Hz)	Pulse width (ns)	Pulse energy (μJ)	Dimensions (mm)
1535	R1535-0.01-3-100-F2B	10	3	100	25x8x7
	R1535-0.01-4-200-F2B	10	4	200	
	R1535-0.01-4-300-F2B	10	4	300	

Mechanical Drawings (in mm)