High Repetition Rate 1535nm Erbium Glass Lasers with PIN

High repetition rate 1535nm Erbium glass lasers with photodetector (PIN) are RealLight's self-developed eye-safe lasers operating at 1-5kHz. This series of lasers are equipped with integrated photodetector(PIN), which is able to provide PD output signal. Utilizing the semiconductor laser packaging technology, these lasers feature compact size, sufficient performance stability and excellent beam quality.

Applications

Obstacle avoidance radar Meteorological radar Laser rangefinder

Key Features

- Integrated PIN, provides PD output signal
- Passively Q-Switched, Er:Glass
- Eye-safe
- Wide temperature operation

Technical Specifications

Wavelength (nm)	1535			
Pulse energy (µJ)	50	20	10	
Pulse width (typ., ns)	5	6	8	
Repetition rate (kHz)	1	2.5	5	
Operating current (A)	5			
PIN amplitude (V@50Ω resistance)	2			
Beam full divergence (typ., mrad)	20	17	18	
Beam profile	TEM ₀₀			
Energy Stability (RMS)	3%			
Weight (g)	12			
Dimensions (L×W×H,mm)	25x8x7			
Operation temperature (°C)	-40~65			
Storage temperature (°C)	-45~80			

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.



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PIN signal and amplitude



Beam profile

Order Information

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Wavelength (nm)	Part Number	Repetition rate (kHz)	Pulse width (ns)	Pulse energy (µJ)	Dimensions (mm)
1535	R1535-1-5-50-F2B	1	5	50	25x8x7
	R1535-2.5-6-20-F2B	2.5	6	20	
	R1535-5-8-10-F2B	5	8	10	

Mechanical Drawings(in mm)



