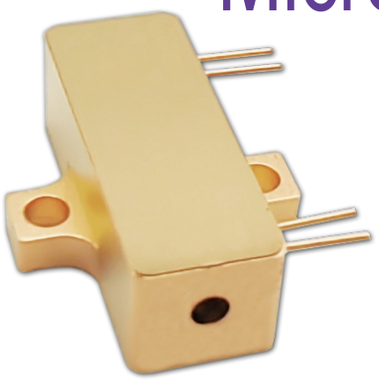
High Repetition Rate 1535nm Microchip Laser module with PIN



High repetition rate 1535nm microchip laser modules with photodetector (PIN) are RealLight's self-developed Er: glass eye-safe lasers operating at 1-10kHz. This series of laser modules 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

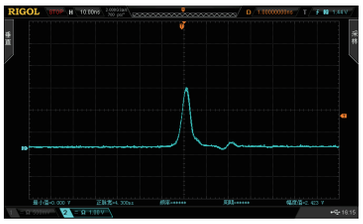
Laser rangefinder

Key Features

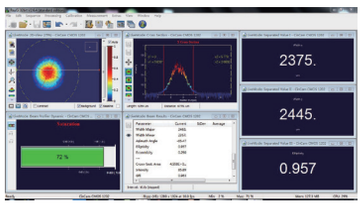
- Integrated PIN, provides PD output signal
- Passively Q-Switched, Er:Glass
- Eye-safe
- Wide temperature operation

Technical Specifications

Wavelength (nm)	1535			
Pulse energy (μJ)	60	20	10	5
Pulse width (ns)	5	6	8	10
Repetition rate (kHz)	1	2.5	5	10
Operating current (A)	6			
PIN amplitude (V@50Ω resistance)	2			
Beam full divergence (typ., mrad)	16	17	18	20
Beam profile	TEM_{00}			
Weight (g)	8			
Dimensions (W×H×L,mm)	21x8x7			
Operation temperature (℃)	-40~65			
Storage temperature (℃)	-55~80			



PIN signal and amplitude



Beam profile

Order Information

Wavelength (nm)	Part Number	Repetition rate (kHz)	Pulse width (ns)	Pulse energy (μJ)	Dimensions (mm)
1535	R1535-1-5-60-F1B	1	5	60	21x8x7
	R1535-2.5-6-20-F1B	2.5	6	20	21x8x7
	R1535-5-8-10-F1B	5	8	10	21x8x7
	R1535-10-10-5-F1B	10	10	5	21x8x7

Mechanical Drawings(in mm)