



# T02 Series

## Eye-safe Laser Transmitter

The T02 series is an integrated laser transmitter consisting of a diode-pumped passively Q-switched Erbium glass laser independently developed by RealLight, a transmitting antenna, and a photodiode. The laser module operates at the eye-safe wavelength of 1535nm and can synchronize the laser pulse signal. The transmitter has the characteristics of small size, small divergence angle, and wide temperature range operation. It is professionally used in LIDAR, laser range finding, laser remote sensing and other fields.

### Key Features

- ◆ Eye-safe laser wavelength
- ◆ Integrated photodiode
- ◆ Small divergence angle
- ◆ Super compact design
- ◆ High reliability

### Technical Specifications

Wavelength ( nm )	1535	
Repetition rate (Hz)	10	
Pulse energy of the laser (μJ)	100	200
Transmitter transmittance	>90%	
Pulse width (typ., ns)	5	
Operating current (A)	8	
Beam full divergence (mrad)	<0.8	
Beam diameter (typ., mm)	5	
Beam profile	TEM <sub>00</sub>	
Energy Stability (RMS)	3%	
PIN amplitude (typ., V@50Ω resistance)	3	
Weight (g)	11	
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.

### Order Information

Wavelength ( nm )	Part Number	Repetition rate (Hz)	Pulse width (ns)	Pulse energy of the laser (μJ)	Beam full divergence(mrad)
1535	R1535-0.01-5-100-T02	10	5	100	<0.8
	R1535-0.01-5-200-T02	10	5	200	<0.8

### Applications

Laser range finding  
Remote sensing  
LiDAR

### Mechanical Drawings (in mm)

