

CONNET LASER TECHNOLOGY



CoLID SERIES

CoLID-1550

• Features:

- 1550nm Eye-safe wavelength
- · High peak power up to10kW
- · Repetition rate from 1kHz to 1MHz
- Pulse width from 0.5ns to 200 ns
- · Energy per pulse up to 30uJ
- · Nearly diffraction-limited beam quality

Applications:

- · LiDAR
- Range finding
- · Telemetry
- · 3D scanning
- · Metrology and pollution detection
- · Other science research

1550nm Short Pulse Fiber Laser for LiDAR

The CoLID series 1550nm short pulse fiber laser for LiDAR of Connet is a fiber laser source delivering high peak power and high pulse energy. Based on Master Oscillator Power- Amplifier (MOPA) configuration and optimized design of multi-staged optical amplification, it can reach high peak power and ns pulse width output. It is an ideal fiber laser source for LiDAR, telemetry and range finding.

The CoLID series 1550nm short pulse fiber laser for LiDAR of Connet housed in a mini disc type module with compact structure and small size. It has wide operating temperature range with low power consumption. The pulse output can be achieved by external TTL trigger signal, which is very suitable for system integration.

Specifications:

Parameter	Unit	Specification		
		Min	Тур	Max
Part No.		CoLID-1550		
Center wavelength ¹	nm	1540	1550	1565
Energy per pulse	μJ	-	-	30
Peak power	kW	-	-	10
Pulse average power	mW	-	-	1000
Pulse width	ns	0.5	-	200
Repetition rate	kHz	1	-	1000
Beam quality	M^2	<1.1		
Output polarization		Random		
Output power stability (15min)	%	-	-	±3
Output power stability ² (8h)	%	-	-	±1.5
Output isolation	dB	35	-	-
Operating temperature (standard)	°C	0	-	50
Operating temperature (optional)	°C	-35	-	+65
Storage temperature	°C	-40	-	85
Power consumption	W	-	-	20
Operating voltage	VDC	5.5 to 12		
Pulse-triggered mode		TTL External trigger		
Length of output pigtail	m	>0.3		
Output termination		FC/APC or Collimator		
Dimension	mm	90x23.5 (D x H)		
Weight	g	<300		

Specifications:

- · Other wavelengths are available;
- \bullet The output power stability is measured under 25 $^\circ\!\mathbb{C}_+$ after 30 minutes' warm-up.

Ordering information:

- · CoLID-1550-XX-YY-ZZ-FA
- XX: Pulse width in ns
- YY: Repetition rate in kHz
- ZZ: Peak power in KW
- FA: FC/APC connector, Collimator (Co) is optional.
- Example: CoLID-1550-07-20-04-FA
- CoLID- I series 1550nm Pulse Fiber laser module, 7ns pulse width, 20kHz repetition rate, 4kW peak power, FC/APC connector.





□ 021–61270289



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