

## CoLID-Mini 1550nm Short Pulse Fiber Laser for LiDAR



### Product Description:

CoLID-Mini 1550nm short pulse fiber laser for LiDAR of Connet is a fiber laser source delivering high peak power and high pulse energy output based on safe wavelength for the human eyes. An optimized design with special configuration can achieve high peak power and ns-level pulse width laser output. It is an ideal light source for LiDAR, telemetry and range finding.

CoLID-Mini 1550nm short pulse fiber laser for LiDAR has a compact structure in small size (70x70x25mm) with wide operating temperature range, low delay jitter and power consumption. The pulse output can be achieved by external TTL trigger signal, which is very suitable for system integration.

### Features:

- High peak power: up to 2kW
- Small size : 70x70x25mm
- Low delay jitter and power consumption
- Good stability in the full temperature range
- Pulse energy: up to 20uJ
- Near-diffraction-limited beam quality

### Applications:

- LiDAR
- Range Finding
- Telemetry
- 3D Scanning
- Other Scientific Research



**Specifications:**

Parameter	Unit	Specification		
		Min	Typ.	Max
Part no.		CoLID-Mini-1550-M		
Operating wavelength	nm	1540	1545/1550	1565
Pulse energy	μJ	-	3	20
Peak power <sup>1</sup>	kW	-	1	2
Pulse width	ns	0.5	3	250
Repetition rate	kHz	100	500-	3000
Average power @>100kHz	W	-	1.5	2
Beam quality	M <sup>2</sup>	<1.1		
Output power stability (15mins)	%	-	-	±3
Output power stability (8hrs)	%	-	-	±1.5
Output isolation	dB	35	-	-
Operating voltage	VDC	7-12		
Operating temperature	°C	-40	-	+65
Storage temperature	°C	-40	-	+85
Power consumption	W	-	14	-
Polarization		Random (Linear Polarization is optional)		
Output fiber length	m	>0.3		
Optical connector		FC/APC or Collimator		
Trigger mode		External TTL Trigger		
Dimension	mm	70x70x25		
Weight	g	<170		

\*Notes: Higher peak power is available.

**Ordering Information:**

- CoLID-Mini-1550-M-PW-RR-PP-FA
- PW: Pulse width in ns
- RR: Repetition rate in kHz
- PP: Peak power in kW, 01: 1kW
- FA: FC/APC connector, Collimator (Col) is optional.
- Example: CoLID-Mini-1550-M-03-500-01-FA  
CoLID-Mini 1550nm Short Pulse Fiber Laser, 3ns pulse width, 500kHz repetition rate, 1kW peak power, FC/APC connector.