

## CoLID-HP 1064nm Short Pulse Fiber Laser for LiDAR

### Product Description:



CoLID-HP 1064nm short pulse fiber laser for LiDAR of Connet is a high peak power, high pulse energy fiber laser source. Using the MOPA configuration and the all-fiber optimized design, the laser can offer the high peak power and near diffraction-limit quality output beam. Connet 1064nm short pulse fiber lasers for LiDAR are the ideal sources for LiDAR applications of 3D scanning, telemetry and range finding, etc.

Connet CoLID-HP 1064nm short pulse fiber laser for LiDAR employs the module package with compact and rugged design, integrated with the internal trigger and the output monitor for synchronization. The external trigger mode is also available for use. CoLID-HP-1064 is easily deployed and maintenance-free ensuring the long-life and cost-effective operations. The pulse width and the repetition rate of the laser can be adjusted by connecting to the computer. It is suitable for system integration.

### Applications:

- LiDAR
- 3D scanning
- Range finding
- Target detection
- Telemetry

### Features:

- High peak power: up to 50kW
- Maximum average power: 5W
- Repetition rate adjustable: 10-500KHz
- Excellent beam quality
- Maintenance-free operation

### Specifications:

Parameter	Unit	Specification		
		Min	Typ.	Max
Part no.		CoLID-HP-1064-M-5-PL	CoLID-HP-1064-M-10-PL	CoLID-HP-1064-M-50-PL
Operating wavelength	nm	1040~1083		
Pulse width <sup>1</sup>	ns	1~50		
Repetition rate <sup>2</sup>	kHz	10~500		
Peak power	kW	5	10	50
Max average power	W	5		
Output power stability <sup>3</sup>	%	±2		
Beam quality <sup>4</sup>	M <sup>2</sup>	1.2		1.3
Operation mode		Pulse		
Polarization		Random		
Trigger mode		Internal or External TTL Trigger		
Output fiber type		SM or LMA fiber		
Output fiber length	m	0.5		
Optical connector		FC/APC or Collimator		
Communication interface		RS232		
Operating voltage	V <sub>DC</sub>	12~24		
Warm-up time	mins	1		
Operating temperature	°C	-35~+50		
Storage temperature	°C	-40~+85		
Cooling mode		Air-cooling		
Dimension	mm	200(L)x135(W)x60(H)		

### Specifications:

- Pulse width is adjustable.
- Repetition rate is adjustable.
- The output power stability is measured under 25°C after 30 minutes' warm-up.
- The beam quality is related to the output power.

### Ordering Information:

- CoLID-HP-1064-M-XX-YY-ZZ-PL
- M: Module
- XX: Pulse width in ns
- YY: Repetition rate in kHz
- ZZ: Peak power in kW