CoLID-HP 1550nm Short Pulse Fiber Laser for LiDAR

Product Description:

CoLID-HP 1550nm short pulse fiber laser for LiDAR is an eye-safe pulsed laser sources for LiDAR with high peak power and high pulse energy. The all-fiber design guarantees the robustness and the maintenance-free operation of the fiber laser module. This pulsed fiber laser is an ideal source for the applications in LiDAR, range finding, 3D scanning and fiber optic sensing, etc.

Connet CoLID-HP 1550nm short pulse fiber laser for LiDAR adopts the compact module package, integrates the internal trigger and the output monitor for synchronization. The external trigger mode is also available for use. It can be easily connected with the computer to adjust the pulse width and the repetition rate. All modules go through the strict environmental examinations to ensure the reliability and the stability. This laser is suitable for system integration.

Applications:
· LiDAR
· Range Finding
· Fiber Optic Sensing
· 3D Airborne Laser Mapping
· Atmosphere and Pollution Monitoring
· Research & Development

Features:
· High peak output: up to 30kW (typ.)
· Adjustable Pulse duration: 1~250ns
· Diffraction-limited output beam
· Maintenance-free operation
· Compact and rugged design

Specifications:

Parameter	Unit	Specification		
		Min	Typ.	Max
Part no.		CoLID-HP-1550-M-PL		
Operating wavelength	nm	1530	1545/1550	1561
Peak power	kW	-	-	30
Pulse width[1]	ns	1	-	250
Repetition rate[2]	kHz	1	-	3000
Average power	W	-	-	5
Beam quality	M^2		-	1.2
Output power stability (15mins)[3]	%	-	±0.5	-
Output power stability (8hrs)[3]	%	-	±1	-
Output isolation	dB	45	-	-
Polarization		Random		
Output fiber length	m	>0.3		
Optical connector		FC/APC or Collimator		
Trigger mode		Internal or External TTL Trigger		
Output fiber type		SM or LMA Fiber		
Power supply	V_{DC}	12-24		
Communication interface		RS232		
Operating temperature	℃	-35	-	+50
Storage temperature	℃	-40	-	+85
Dimension	mm	200(L)X135(W)x41(H)		

Specifications:

· Pulse width is adjustable.

· Repetition rate is adjustable.

· The output power stability is measured under 25℃ after 30 minutes' warm-up.

Ordering Information:

· CoLID-HP-1550-M-XX-YY-ZZ-PL

· XX: Pulse width in ns

· YY: Repetition rate in kHz

· ZZ: Peak power in kW

· Example: CoLID-HP-1550-M-10-50-10-PL

 CoLID-HP 1550nm short pulse fiber laser, 10ns pulse width, 50kHz repetition rate, 10kW Peak power