

## Specification of Picosecond Laser

S.No.	Description	Specification
1	Oscillator	DPSS pumped regenerative amplifier
2	Wavelength requirements	1064, 532, 355 and 266 nm (harmonic generation options)
3	Pulse energy at different wavelengths - 1064 nm - 532 nm - 355 nm - 266 nm	≥90 mJ ≥50 mJ ≥30 mJ ≥12 mJ
4	Pulse energy stability (StdDev) @ 1064 nm and 532 nm @355 nm and 266 nm	< 1 % < 2 %
5	Pulse Duration (FWHM)	30 +/- 5 ps or better
6	Pulse duration stability	+/- 1 ps
7	Repetition rate	Single shot to 10 Hz
8	Polarization	Linearly polarized, vertical, ≥99 %
9	Optical pulse trigger Internal trigger jitter External trigger jitter	Internal or External <100 ps 3-5 ns
10	Beam divergence	<0.5 mrad
11	Beam pointing stability	≤ 25 μrad
12	Beam Diameter	10 -15 mm
13	Pre pulse contrast	>200:1 (peak-to-peak with respect to residual pulses)
14	Operational Requirements	Water chiller, work at room temperature within 22-25°C
15	Physical Characteristics	Compatible with the optical table of dimensions ( 240 cm x 120 cm) (LxW)
16	Control	PC through USB,RS232,LAN, Remote control via keypad
17	Power Requirements	single phase, 200 – 240 V AC, 16 A, 50/60 Hz
18	Accessories	Tubes (≥ 15 m) for water chiller, Trigger cables, Laptop with control driver and software Power meter etc. All essential/ required accessories should be quoted and provided along with the laser

19	Warranty	3 years
20	Protection/assurance for spare parts	10 years minimum
21	Cataloged/ standard item of the company	The quoted product must be a standard cataloged item. Vendor must provide data sheet with performance results clearly demonstrating the capability of proposed system with respect to critical parameters (Sr. No 1-12)
22	Proof of supply/ commissioning of similar laser system globally in the last 3 years	Details of such orders must be shared
23	Service	Manufacturer must have trained service personnel in India for any immediate service and troubleshooting

**Note: The vendor must provide the specification sheets with all the supporting graphs and test reports.**