

Mode-Lock Laser

PERFORMANCE SPECIFICATION OF MODE LOCK LASER		
A. LASER Specifications		
1	Wavelength Range	1530 nm – 1565 nm
2	Pulse Repetition Rate (PRR)	31.25 MHz, 62.5 MHz, 125 MHz, 250 MHz, 500 MHz, 1 GHz, 5 GHz, 10 GHz, and 20 GHz with Internal RF Synthesizer Step Tunable from 500 MHz to 20 GHz with external RF input and Impulse Generators
3	PRR continuously tunable	±200 kHz @ 500 MHz, ±5 MHz @ 10 GHz
4	Pulsewidth	Tunable 1.6 ps to 15 ps
5	Timing Jitter	< 50 fs
6	Supermode suppression	> 55 dB @ 500 MHz, >70 dB @ 10 GHz
7	Primary Output Power through single mode PM Optical Fiber	> 40 mW @ 20 GHz and 5 ps
8	Two secondary optical monitor ports	Required
9	Output Power stability	Better than 1%
B. Integrated Polarization Maintaining Optical Fiber Amplifier		
1	Output Power	> 200 mW @ 500 MHz or 20 GHz
C. Other SPECIFICATIONS		
1	Monitor Photodiode (> 10 GHz) RF output on the back panel	
2	RF Monitor output (on the BP) of the RF at the Mach-Zehnder modulator	
3	Auxiliary output of the internal RF clock	
4	Integrated Supermode Noise Meter (SMNM)	
5	Simultaneous front panel display of pump current, modulator DC bias, RF power monitor, SMNM, and error signal	
6	Integrated monitor to confirm laser is mode-locked without using any external instruments	
D. Supplier should provide technical compliance including explanations without fail against each point		
E. Power requirement: As per Indian electrical standards (230V AC, 50 Hz)		
F. Warranty: Comprehensive warranty for 1 year from the date of installation.		
G. Parent company should be an established company with good number of installations (at least 20) and		
H. Standard configurations will be required. NO CUSTOM BUILT SYSTEMS WILL BE ENTERTAINED.		

