



INDIAN INSTITUTE OF TECHNOLOGY BOMBAY
MATERIALS MANAGEMENT DIVISION
Powai, Mumbai 400076.

PR No. 1000045947

Rfx. No.6100002055

Technical specifications of 3-color (Wavelengths 405 nm, 450 nm and 515 nm) Gain-Switched Picosecond Laser.

Sr. No	Detailed Technical Specification	Technical Compliance (Yes / No)	Additional Information (if any)
1.	Pulsed and Continuous Wave (CW) operation with fast CW switching		
2	Suitable for measuring fluorescence lifetime (ns) and photoluminescence lifetime (μ s-ms) with existing PicoQuant time-correlated single photon counting system		
3	Triggerable internally and externally, up to 200 MHz		
4	Fully computer controlled		
5	SM-PM fiber-coupling at least for 450 nm and 515 nm with 35% coupling efficiency		
6	Maximum pulsed power at each of 3 wavelengths: At least 9 mW		
7	Maximum CW power: At least 50 mW		
8	Puls duration: 100-180 ps		
9	Beam diameter: 0.5 to 1 mm		
10	Polarization: Linear Polarization with extinction Ratio better than 1:10 \		
11	Spectral width FWHM (pulsed): Less than 6 nm		
12	Spectral width FWHM (cw): Less than 3 nm		
13	Internal repetition rate: User selectable 1 kHz to 200 MHz 1000 increments of 1 kHz from 1 to 999 kHz 200 increments of 1 MHz from 1 to 200 MHz		
14	External repetition rate: 0 Hz to 200 MHz		
15	Rise / Fall Time < 3 ns		
16	Temperature range 10 - 35 °C		
17	Maximum power consumption < 30 W		

18	PC interface USB 2.0 Connector USB-C		
19	Warranty: 1 year from the date of installation or demonstration of successful operation		