



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

Ref. PR No-1000040195

RFx. No. 6100001899

Item Description: - **Dual pulsed laser**

Sr. No	Detailed Technical Specification	Technical Compliance (Yes / No)	Additional Information (if any)
	Dual pulsed laser (Qyt-1)		
1.	Technical Specification of Dual pulsed laser		
1a.	Dual pulsed laser for Particle Image Velocimetry		
1b.	Output Energy: 200 mJ @ 532nm each channel;		
1c.	Rep Rate: single shot to 15 Hz;		
1d.	Beam Diameter: less than or equal to 6.5 mm;		
1e.	Timing Jitter: < 0.5 ns;		
1f.	Beam Divergence: < 1.5 mrad;		
1g.	Pulse length: 7 – 10 ns;		
2	The laser system must include		
2a.	Dual Pulsed Q Switched PIV Laser head Power supply and cooling system; Remote control with touch screen;		
2b.	Adapter to connect the fibre guide;		
2c.	Light Sheet Optics with Variable focus: 0.3 – 3.5 m; Divergence angle: less than or equal to 25° with a rotation of 360°		
2d.	Hard-coated lenses with damage threshold: - ≥ 10 J/sq. cm.		
2e.	A beam guiding arm with length > 1500 mm, the damage threshold of the mirrors is 532nm expected to be greater than 5J/sq cm.		

3	Additional requirements (Accessories)		
3a	The laser and the light guiding arms should be compatible with the standard CCD camera the user provides. The integration needs to be demonstrated.		
3b	Three years of warranty required		