

## Technical Specification for Continuous wave lasers

Required specifications for the lasers:

**Table 1.** Laser1.

Specifications	
Wavelength	639 nm
Output power	$\geq 1$ W
Transverse mode	Near TEM <sub>00</sub>
Operating mode	CW (continuous wave)
Beam diameter	$\geq 4$ mm
Beam divergence	$< 3$ mrad
Adjustable power	Yes
Power source	230 V, AC
Power stability	$< 5\%$
Power supply	Should be included
Should confirm to	RoHS
Certification required	FDA, CE
Warranty	1 year

**Table 2.** Laser 2.

Specifications	
Wavelength	447 nm
Output power	$\geq 1$ W
Transverse mode	Near TEM <sub>00</sub> (preferable)
Operating mode	CW (continuous wave)
Beam diameter	$\geq 4$ mm
Beam divergence	$< 3$ mrad
Adjustable power	Yes
Power source	230 V, AC
Power stability	$< 5\%$
Power supply	Should be included
Should confirm to	RoHS
Certification required	FDA, CE
Warranty	1 year

**Table 3.** Laser 3.

Specifications	
Wavelength	457 nm
Output power	$\geq 1$ W
Transverse mode	Near TEM <sub>00</sub> (preferable)
Operating mode	CW (continuous wave)
Beam diameter	$\geq 3$ mm
Beam divergence	$< 3$ mrad
Adjustable power	Yes
Power source	230 V, AC
Power stability	$< 5\%$
Power supply	Should be included
Should confirm to	RoHS
Certification required	FDA, CE

Warranty	1 year
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**Optional items:** Line generator optics for Laser 1, Laser 2, Laser 3.

1. Bidders need to quote for all 3 Laser equipment categories in the following combinations.
  - a. Laser 1 & Laser 2 with individual specification and price.
  - b. Laser 1 & Laser 3 with individual specification and price.
  
2. IIT Madras will decide the purchase Option either **a** or **b** as specified above.