

Specifications for He-Cd Laser (325 nm)

- Laser should give output power of 50 mW in TEM₀₀ Mode (essential).
- Beam diameter at $1/e^2$ must be ≤ 1.3 mm.
- Beam divergence should be < 1 mrad.
- Beam pointing stability should be ± 25 μ rad at 25°C constant temperature.
- Power stability at 25°C must be less than 3% (for 3 to 4 hours).
- Suitable environmental condition for operation would be in the temperature range of 10 to 40°C and humidity $\leq 90\%$ RH.
- Preferred environmental condition for storage would be in the temperature range of 10 to 50°C and humidity $\leq 90\%$ RH.
- Peak-to-Peak Noise at 30kHz~2MHz should be less than $< 15\%$
- Noise (RMS) at 30kHz~10MHz should be less than $< 5\%$
- Laser class must be in 3B
- Laser life should be at least 2000 hours.
- Laser should operate with air cooling.
- A list of references in India, where similar systems have been installed, must be provided and will be the main criteria for decision making (preferred more than 25).