

MSL-III-1053L/1-120mW



**SINGLE LONGITUDINAL  
MODE INFRARED DIODE  
LASER AT 1053nm**

It features ultra compact design, long lifetime, cost-effectiveness and easy operation. They are used in Raman spectroscopy, speckle interferometry, bio-instrumentation, metrology, sensing, analytical instrumentation.

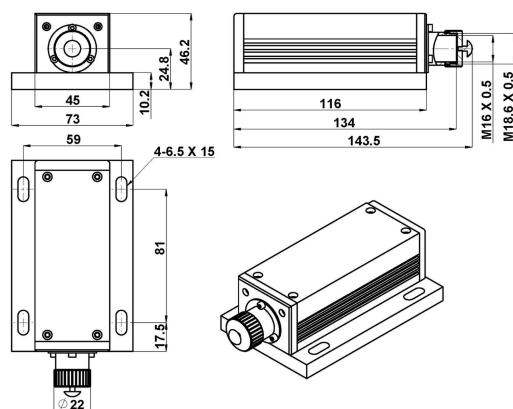


SPECIFICATIONS

|                                                       |                                                                     |
|-------------------------------------------------------|---------------------------------------------------------------------|
| Central wavelength (nm)                               | 1053±0.5                                                            |
| Operating mode                                        | CW                                                                  |
| Output power (mW) <sup>1</sup>                        | 1-120                                                               |
| Power stability (rms, 4 hours ± 3°C)                  | <2%, <1%, <0.5%                                                     |
| Transverse mode                                       | Near TEM <sub>00</sub>                                              |
| Longitudinal mode                                     | Single                                                              |
| Spectral line width (MHz)                             | <100, (<50 optional)                                                |
| Coherent length (m)                                   | >2                                                                  |
| Noise of amplitude (rms, 20Hz-20MHz)                  | <1%, <0.5%                                                          |
| M <sup>2</sup>                                        | <1.5                                                                |
| Beam diameter at the aperture (1/e <sup>2</sup> , mm) | ~1.0                                                                |
| Beam divergence, full angle (mrad)                    | ~2.0                                                                |
| Polarization ratio                                    | >50:1, (>100:1 optional)<br>Horizontal±5 degree (Vertical optional) |
| Warm-up time (minutes)                                | <5                                                                  |
| Beam height from base plate (mm)                      | 24.8                                                                |
| Operating temperature (°C)                            | 10-35                                                               |
| Power supply (100-240VAC)                             | PSU-III-FDA                                                         |
| Expected lifetime (hours)                             | >10000                                                              |

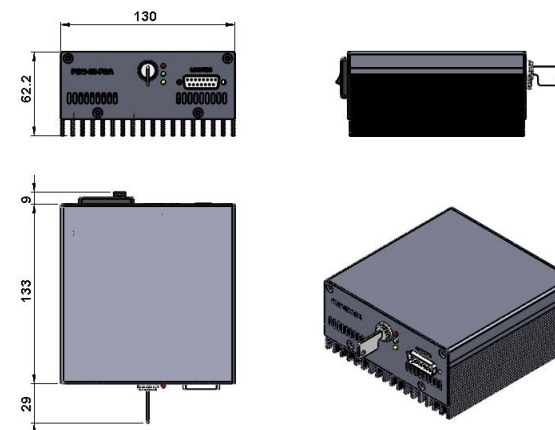


LASER HEAD



143.5 (L) × 73 (W) × 46.2 (H) mm<sup>3</sup>, 0.7kg

POWER SUPPLY<sup>2</sup>



171 (L) × 130 (W) × 62.2 (H) mm<sup>3</sup>, 1.2kg

1 Any power level can be selected in this range.

2 Fixed output power.

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