

MDL-III-447L/1-500mW



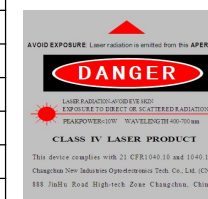
BLUE DIODE LASER  
AT 447nm

It features ultra compact design, long lifetime, cost-effectiveness and easy operation. They are used in medical imaging, flow cytometry, DNA sequencing, etc.



SPECIFICATIONS

|                                                       |                                                                                  |      |
|-------------------------------------------------------|----------------------------------------------------------------------------------|------|
| Central wavelength (nm)                               | 447±5                                                                            |      |
| Operating mode                                        | CW                                                                               |      |
| Output power (mW) <sup>1</sup>                        | 1-500                                                                            |      |
| Power stability (rms, 4 hours ± 3°C)                  | <2%, <1%, <0.5%                                                                  |      |
| Transverse mode                                       | Near TEM <sub>00</sub>                                                           |      |
| M <sup>2</sup>                                        | <1.5                                                                             | <1.2 |
| Beam diameter at the aperture (1/e <sup>2</sup> , mm) | ~3.5                                                                             | ~1.2 |
| Beam divergence, full angle (mrad)                    | <1                                                                               |      |
| Polarization ratio                                    | >50:1, (>100:1 optional)<br>Horizontal±5 degree (Vertical optional)              |      |
| Warm-up time (minutes)                                | <5                                                                               |      |
| Cooled method                                         | Conduction                                                                       |      |
| Beam height from base plate (mm)                      | 24.8                                                                             |      |
| Operating temperature (°C)                            | 10-35                                                                            |      |
| Power supply (100-240VAC)                             | PSU-III-FDA/PSU-III-LED/PSU-A-D/PSU-III-OEM                                      |      |
| Modulation option                                     | DC-1kHz, 1kHz-10kHz, 10kHz-30kHz, 30kHz-100kHz optional; TTL and Analog optional |      |
| Expected lifetime (hours)                             | >10000                                                                           |      |



LASER HEAD



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

POWER SUPPLY (PSU-III-FDA)<sup>2</sup>



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

POWER SUPPLY (PSU-III-LED)<sup>3</sup>



179 (L) × 155 (W) × 92 (H) mm<sup>3</sup>, 1.5kg

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| POWER SUPPLY (PSU-A-D) <sup>4</sup>                                                                                                       | DRIVER (PSU-III-OEM) <sup>2</sup>                                                                                                           | POWER SUPPLY (100-240VAC) optional                                                                                                               |
|-------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
|  <p>162 (L) × 144 (W) × 70 (H) mm<sup>3</sup>, 1.0kg</p> |  <p>100 (L) × 62 (W) × 55.2 (H) mm<sup>3</sup>, 0.5kg</p> |  <p>125.7 (L) × 50.2 (W) × 31.8 (H) mm<sup>3</sup>, 0.3kg</p> |

1 Any power level can be selected in this range.

2 Fixed output power; Modulation up to 30kHz.

3 Output power adjustable 10-100%; RS232 control optional; Modulation up to 30kHz.

4 Output power adjustable 10-100%; RS232 control optional; Modulation up to 100kHz.