

**MDL-III-454L/1~80mW**



**BLUE DIODE LASER  
AT 454nm**

It features ultra compact design, long lifetime, cost-effectiveness and easy operation. They are used in scientific research, measurement, communication, spectrum analysis, etc.



**SPECIFICATIONS**

|  |  |  |
|--|--|--|
| Central wavelength (nm)                              | 454±5  |  |
| Operating mode                                       | CW   |  |
| Output power (mW)                                    | >1, 10, 20, ..., 80  |  |
| Power stability (rms, over 4 hours)                  | <1%, <2%, <3% (<0.5%, optional)  |  |
| Transverse mode                                      | Near TEM <sub>00</sub>   |  |
| M <sup>2</sup> factor                                | <1.5   |  |
| Beam diameter at the aperture (1/e <sup>2</sup> ,mm) | ~3.5   |  |
| Beam divergence, full angle (mrad)                   | <1   |  |
| Polarization ratio                                   | >50:1 (>100:1, optional)<br>Horizontal±5 degree (Vertical Optional)        |  |
| Warm-up time (minutes)                               | <5   |  |
| Pointing stability after warm-up (mrad)              | <0.05  |  |
| Beam height from base plate (mm)                     | 24.8   |  |
| Operating temperature (°C)                           | 10~35  |  |
| Power supply   | 85-264VAC  | PSU-III-LED/ PSU-III-FDA (Frequency for 1Hz-30kHz) |
|  | 100-240VAC   | PSU-A-D (Frequency for 30kHz -100kHz)              |
| TTL / Analog modulation                              | TTL or Analog with 1Hz-1kHz 1kHz-10kHz, 10kHz-30kHz, 30kHz-100kHz optional |  |
| Expected lifetime (hours)                            | 10000  |  |
| Warranty   | 1 year   |  |



| MDL-III-454L  | PSU-III-LED   | PSU-III-FDA  | PSU-A-D   |
|---|---|--|---|
| <p>143.5(L)×73(W)×46.2(H) mm<sup>3</sup>, 0.7kg</p> | <p>188.6 (L) ×155(W)×92 (H) mm<sup>3</sup>, 1.5kg</p> | <p>171(L) ×130(W) ×6.2 (H) mm<sup>3</sup>, 1.2kg</p> | <p>162(L) ×144(W) ×70 (H) mm<sup>3</sup>, 1.0kg</p> |