

**MDL-III-442L/1~80mW**



**BLUE DIODE LASER  
AT 442nm**

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



**SPECIFICATIONS**

Central wavelength (nm)	442±10
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 (<1.2, optional)
Beam diameter at the aperture (1/e <sup>2</sup> ,mm)	~3.5 (~1.2, optional)
Beam divergence, full angle (mrad)	<1
Polarization ratio	>50:1 (>100:1, optional) 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-442L	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) ×62.2 (H) mm<sup>3</sup>, 1.2kg</p>	<p>162(L) ×144(W) ×70 (H) mm<sup>3</sup>, 1.0kg</p>