



MDL-III-415/1-100mW



VIOLET DIODE LASER
AT 415nm

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)	415±5	
Operating mode	CW	
Output power (mW) ¹	1-100	
Power stability (rms, 4 hours ± 3°C)	<2%, <1%, <0.5%	
Transverse mode	Near TEM ₀₀	
M ²	<1.5	<1.2
Beam diameter at the aperture (1/e ² , mm)	~3.5	~1.2
Beam divergence, full angle (mrad)	<1.0	
Polarization ratio	>50:1, (>100:1 optional) 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	POWER SUPPLY (PSU-III-FDA) ²	POWER SUPPLY (PSU-III-LED) ³
<p>143.5 (L) × 73 (W) × 46.2 (H) mm³, 0.7kg</p>	<p>171 (L) × 130 (W) × 62.2 (H) mm³, 1.2kg</p>	<p>179 (L) × 155 (W) × 92 (H) mm³, 1.5kg</p>

POWER SUPPLY (PSU-A-D) ⁴	DRIVER (PSU-III-OEM) ⁵	POWER SUPPLY (100-240VAC) optional
<p>162 (L) × 144 (W) × 70 (H) mm³, 1.0kg</p>	<p>100 (L) × 62 (W) × 55.2 (H) mm³, 0.5kg</p>	<p>125.7 (L) × 50.2 (W) × 31.8 (H) mm³, 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.
- 5 Fixed output power; Modulation up to 30kHz.