

MLL-III-642-SM/1-100mW



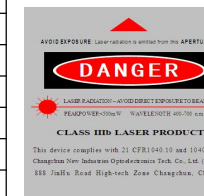
**LOW NOISE RED DIODE  
LASER AT 642nm**

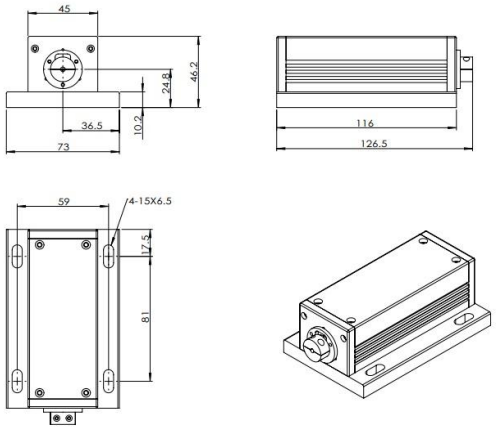
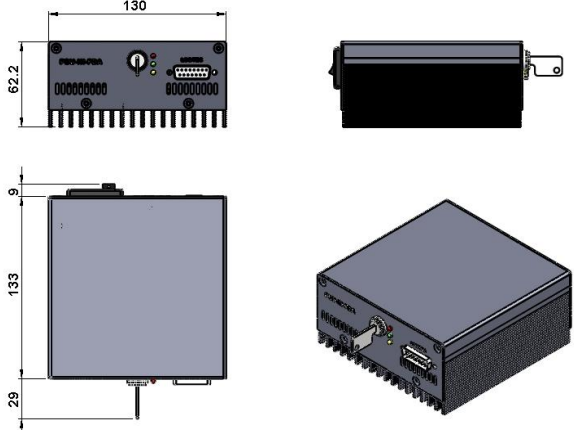
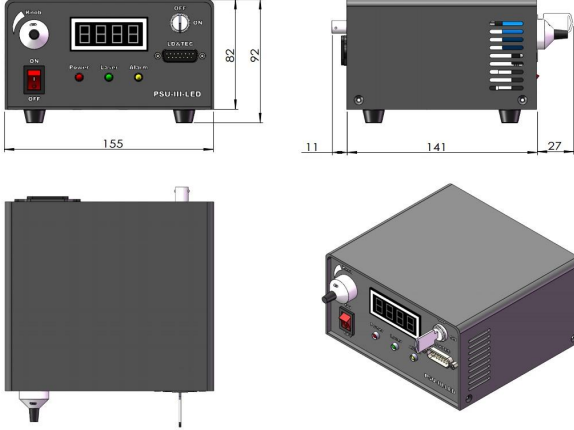
It features ultra compact design, long lifetime, cost-effectiveness and easy operation. They are used in medical imaging, flow cytometry, DNA sequencing, etc.

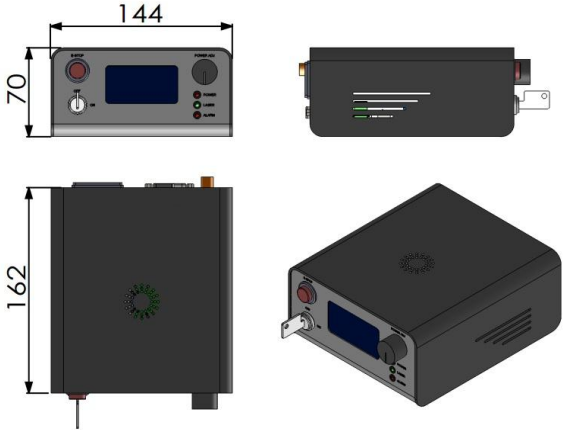
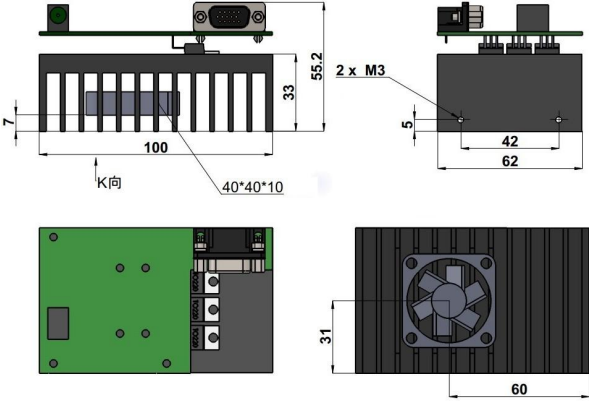
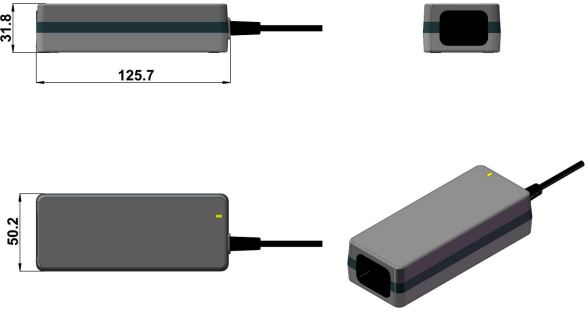


SPECIFICATIONS

Central wavelength (nm)	642±10
Operating mode	CW
Output power after fiber (mW) <sup>1</sup>	1-100
Power stability (rms, 4 hours ± 3°C)	<2%, <1%, <0.5%
Noise of amplitude (rms, 20Hz-20MHz)	<1%, <0.5%
Fiber type	SM fiber, PM fiber optional
Fiber Core diameter	4-9µm, 0.12NA
Fiber connector	FC/PC, FC/APC optional
Fiber length <sup>2</sup>	1m
Fiber jacket	Metal, PVC optional
Transverse mode	TEM <sub>00</sub>
Ellipticity	>0.95
M <sup>2</sup> after fiber	~1.1
Warm-up time (minutes)	<5
Cooled method	Conduction
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) <sup>3</sup>	POWER SUPPLY (PSU-III-LED) <sup>4</sup>
 <p>126.5 (L) × 73 (W) × 46.2 (H) mm<sup>3</sup>, 0.7kg</p>	 <p>171 (L) × 130 (W) × 62.2 (H) mm<sup>3</sup>, 1.2kg</p>	 <p>179 (L) × 155 (W) × 92 (H) mm<sup>3</sup>, 1.5kg</p>

POWER SUPPLY (PSU-A-D) <sup>5</sup>	DRIVER (PSU-III-OEM) <sup>3</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 Other lengths are available on request.
- 3 Fixed output power; Modulation up to 30kHz.
- 4 Output power adjustable 10-100%; RS232 control optional; Modulation up to 30kHz.
- 5 Output power adjustable 10-100%; RS232 control optional; Modulation up to 100kHz.