

MLL-III-445/447/450/80~100mW



LOW NOISE BLUE DIODE  
LASER AT 445/447/450 nm

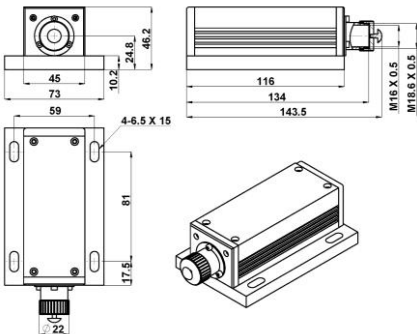
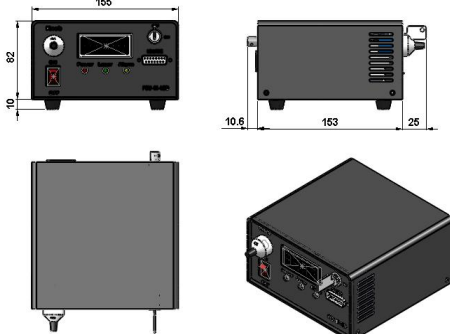
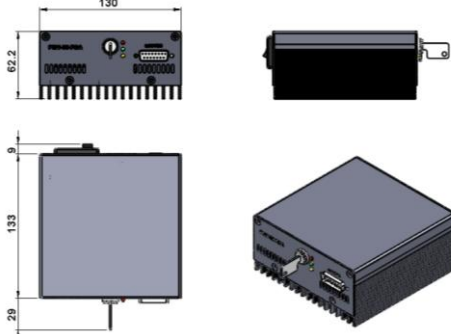

It features ultra compact design, long lifetime, cost-effectiveness and easy operation. They are widely used in measurement, communication, scientific research, laser pointing and RGB mixed laser systems applications.



SPECIFICATIONS

Model	MLL-III-445	MLL-III-447	MLL-III-450
Central wavelength (nm)	445±5	447±5	450±5
Operating mode	CW		
Output power (mW)	>80,90,...,500		>500,600,...,1000
Power stability (rms, over 4 hours)	<1%, <2%, <3% (<0.5%, optional)		
Transverse mode	Multimode		
Noise of amplitude(rms,20Hz~20MHz)	<1%		
Beam diameter at the aperture ((1/e <sup>2</sup> ),mm)	<2.5×5.2		<2×5
Beam divergence, full angle (mrad)	<2.1×1.6		<2.5×0.2
Polarization ratio	>50:1 (>100:1, optional) Horizontal±5 degree (Vertical Optional)		
Warm-up time (minutes)	<5		
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		



MLL-III-445/447/450	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>

MLL-III-488/50~150mW



LOW NOISE BLUE DIODE  
LASER AT 488 nm

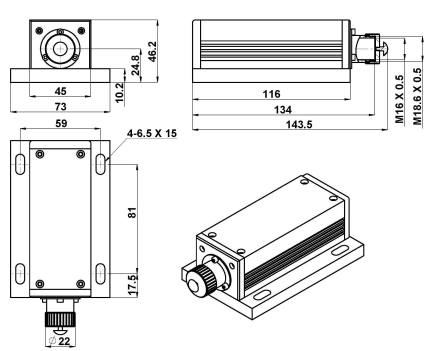
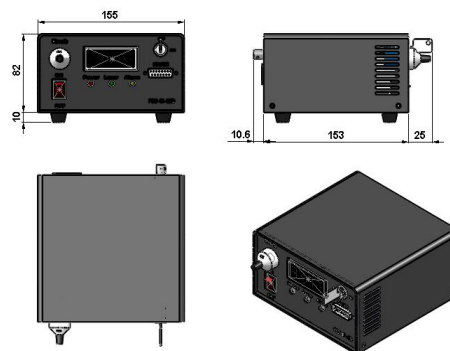
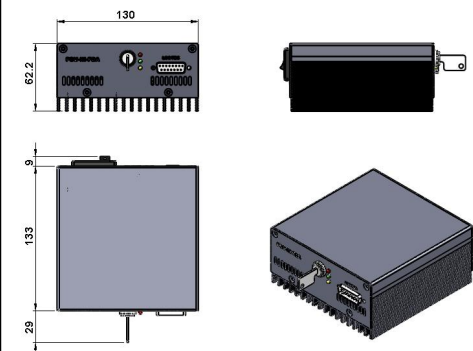
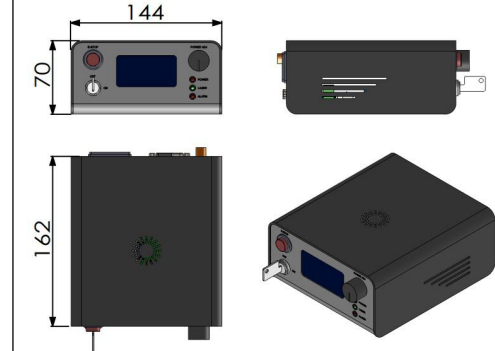
It features ultra compact design, long lifetime, cost-effectiveness and easy operation. They are used in medical imaging, flow cytometry, DNA sequencing, etc.



SPECIFICATIONS

Central wavelength (nm)	488±5
Operating mode	CW
Output power (mW)	>50, 60, ..., 150
Power stability (rms, over 4 hours)	<1%, <2%, <3% (<0.5%, optional)
Transverse mode	Near TEM <sub>00</sub>
Noise of amplitude(rms,20Hz~20MHz)	<1%
M <sup>2</sup> factor	<1.5
Beam diameter at the aperture (1/e <sup>2</sup> ,mm)	~3.0
Beam divergence, full angle (mrad)	~1.0
Polarization ratio	>50:1 (>100:1, optional) Horizontal±5 degree (Vertical Optional)
Warm-up time (minutes)	<5
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



MLL-III-488	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>

MLL-N-515/1~100mW



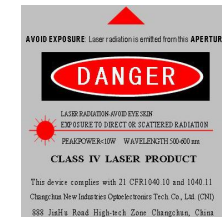
LOW NOISE GREEN LASER AT 515NM

Low noise 515nm green laser is made features of ultra compact, long lifetime and easy operating, which is widely used in laser medical treatment, scientific experiment, optical instrument, etc.



SPECIFICATIONS

Wavelength (nm)	515 ± 1	
Operating mode	CW	
Output power (mW)	>1, 10, 20, ..., 100	
Power stability (rms, over 4 hours)	<1%, <2%, <3%, <5%	
Transverse mode	TEM <sub>00</sub>	
Noise of amplitude (rms, 1~20MHz)	<1%	
M <sup>2</sup> factor	<1.2	
Beam divergence, full angle (mrad)	<1.2	
Beam diameter at the aperture (1/e <sup>2</sup> ,mm)	~2.0	
Warm-up time (minutes)	<10	
Polarization ratio	>100:1	
Beam height from base plate (mm)	68.5	
Operating temperature (°C)	10~35	
Power supply (90-264VAC)	PSU-H-LED	PSU-H-FDA
TTL / Analog modulation	TTL or Analog with 1Hz-1kHz 1kHz-10kHz, 10kHz-30kHz optional	
Expected lifetime (hours)	10000	
Warranty period	1 year	



MxL-N-515	PSU-H-LED	PSU-H-FDA
<p>245 (L) × 99 (W) × 94 (H) mm<sup>3</sup>, 2.6 kg</p>	<p>307 (L) × 150 (W) × 106 (H) mm<sup>3</sup>, 2.9 kg</p>	<p>307 (L) × 150 (W) × 106 (H) mm<sup>3</sup>, 2.9 kg</p>



MLL-III-532/1~300mW



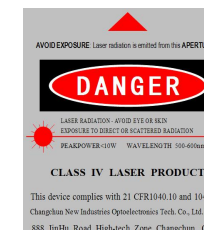
LD PUMPED ALL-SOLID-STATE  
LOW NOISE GREEN LASER

All solid state 532nm green laser is made features of ultra compact, long lifetime, low cost and easy operating, which is widely used in DNA sequencing, flow cytometry, cell sorting, optical instrument, spectrum analysis, interference, measurement, holography, laser printing, chip inspection, physics experiment, etc.



SPECIFICATIONS

Wavelength (nm)	532±2	
Operating mode	CW	
Output power (mW)	>1, 5, 10, 20, ... , 200	>200, ... , 300
Power stability (rms, over 4 hours)	<1%, <2%, <3%	<2%, <3%
Transverse mode	TEM <sub>00</sub>	
Noise of amplitude (rms, 20Hz~20MHz)	<1%, <0.5%	
M <sup>2</sup> factor	<1.2 (<1.1 optional)	
Beam diameter at the aperture 1/e <sup>2</sup> (mm)	~1.2	
Beam divergence, full angle (mrad)	<1.5	
Polarization ratio	>100:1, Horizontal±5 degree (Vertical Optional)	
Warm-up time (minutes)	<10	
Pointing stability after warm-up (mrad)	<0.05	
Beam height from base plate (mm)	24.8	
Operating temperature (°C)	10~35	
Power supply (90-264VAC or 5VDC)	PSU-III-FDA PSU-III-OEM-97	
Expected lifetime (hours)	10000	
Warranty	1 year	



MLL-III-532	PSU-III-FDA	PSU-III-OEM-97
<p>140.5 (L) × 73 (W) × 46.2 (H) mm<sup>3</sup>, 0.6kg</p>	<p>133 (L) × 130(W) × 62.2 (H) mm<sup>3</sup>, 1.2kg</p>	<p>94(L)×75(W)×49(H)mm<sup>3</sup>, 0.23kg</p>



MLL-FN-561/1~200mW



**LD PUMPED ALL-SOLID-STATE  
LOW NOISE YELLOW GREEN  
LASER AT 561nm**

Low noise yellow green laser at 561nm is made features of ultra compact, long lifetime, low cost and easy operating, which is used in scientific experiment, optical sensor, measurement, instrument, communication, spectrum analysis, etc.

**SPECIFICATIONS**

Wavelength (nm)	561±1	
Operating mode	CW	
Output power (mW)	>1, 5, 10, 20, ... , 100	>100, ... , 200
Power stability (rms, over 4 hours)	<1%, <2%, <3%	<2%, <3%, <5%
Transverse mode	TEM <sub>00</sub>	
M <sup>2</sup> factor	<1.2	
Noise of amplitude (rms, 20Hz~20MHz)	<1%	
Beam diameter at the aperture (1/e <sup>2</sup> , mm)	~2.0	
Beam divergence, full angle (mrad)	<1.5	
Polarization ratio	>100:1 Vertical ±5 degree (Horizontal Optional)	
Warm-up time (minutes)	<10	
Pointing stability after warm-up (mrad)	<0.05	
Beam height from base plate (mm)	27.4	
Operating temperature (°C)	10~35	
Power supply (90-264VAC)	PSU-H-FDA	
Expected lifetime (hours)	10000	
Warranty	1 year	



Note: The laser head needs to be used on a heat sink with good heat dissipation.

MLL-FN-561	PSU-H-FDA
<p>197(L)×70(W)×50(H) mm<sup>3</sup>, 2.0 kg</p>	<p>236(L) ×145(W) ×104(H) mm<sup>3</sup>, 2.3 kg</p>



MLL-III-635L/637/640/1~200mW



LOW NOISE RED DIODE LASER  
AT 635/637/640nm

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



SPECIFICATIONS

Model	MLL-III-635L	MLL-III-637	MLL-III-640
Central wavelength (nm)	635±5	637±5	640±5
Operating mode	CW		
Output power (mW)	>1,10,20,...., 200		
Power stability (rms, over 4 hours)	<1%, <2%, <3% (<0.5%, optional)		
Transverse mode	Near TEM <sub>00</sub>		
Noise of amplitude (rms, 20Hz~20MHz)	<1%		
M <sup>2</sup> factor	<1.5 (<1.2, optional)		
Beam diameter at the aperture (1/e <sup>2</sup> ,mm)	~3.0 (~1.2, optional)		
Beam divergence, full angle (mrad)	<1.0		
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		



MLL-III-635L/637/640	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>