

## LLS-0527 Low-Noise DPSS Laser System

# Image Coming Soon!

### Series Specifications:

|                    |          |
|--------------------|----------|
| Nominal Wavelength | 526.5 nm |
| Output Type        | CW       |
| Laser Source Type  | DPSS     |

### Overview:

The LLS-0527 Series of Low-Noise Diode-Pumped Solid-State (DPSS) Lasers are ideal for applications requiring less than 1% noise and output power levels from 5 mW to 300 mW. These 526.5 nm lasers maintain a high level of long-term output power stability and long operating lifetime at an aggressively competitive cost.

These lasers are commonly used for fluorescence excitation, PIV, Raman Spectroscopy, and a broad spectrum of other applications. The driver is available as a complete FDA-compliant system or as an O.E.M. component with significantly reduced dimensions.

Laserglow products are currently being used by some of the World™s top universities and other prominent research facilities.

### Key Features:

- 1% optical noise (20 Hz-20 MHz)
- Air cooled no need for water cooling or external chiller
- Lightweight, compact design
- Efficient DPSS technology runs on standard AC power (85 264 V, 47 63 Hz)
- >10,000 hours continuous maintenance-free operating life
- FDA CDRH Compliant Class IIIb / Class IV enclosure
- 48-hour replacement coverage available for an additional fee on specific models

### Package Includes:

- Laser Head
- Driver/Power Supply
- Power Cable
- Keys, Safety Interlock
- Hard-shell Carrying Case

## Specifications:

This spec sheet has been generated specifically for part number L5A-M, per your request, and data for the entire series is also displayed for your reference. The specs which are specific to L5A-M have been highlighted below in **red + bold**.


|   |   |                           |
|---|---|---------------------------|
| Output Power (mW)                               | <b>&gt;5, &gt;10, &gt;20, &gt;50, &gt;80, &gt;100</b> | >200, >300                |
| Output Power Stability (%RMS/4h)                | <b>&lt;2, &lt;3, &lt;5</b>                            | <3, <5                    |
| Central Wavelength (nm)                         | <b>526.5</b>  | 526.5                     |
| Wavelength Tolerance (+/- nm)                   | <b>1</b>  | 1                         |
| Divergence (mrad, full angle)                   | <b>&lt;1.5</b>  | <1.5                      |
| Beam Dimensions (mm, 1/e <sup>2</sup> )         | <b>1.2</b>  | 2                         |
| Warm-up Time (minutes)                          | <b>10</b>   | 10                        |
| Optical Noise Amplitude (%RMS @ 20 Hz - 20 MHz) | <b>&lt;1</b>  | <1                        |
| M <sup>2</sup>                                  | <b>&lt;1.2</b>  | <1.5                      |
| Polarization Ratio                              | <b>&gt;100</b>  | >100                      |
| Beam Pointing Stability (mrad)                  | <b>&lt;0.05</b>                                       | <0.05                     |
| Operating Temperature Range (°C)                | <b>10 to 35</b>                                       | 10 to 35                  |
| Total Power Consumption (W)                     | <b>35</b>   | 35                        |
| Max. Power Input Duty Cycle                     | <b>100%</b>   | 100%                      |
| Standard Warranty (months)                      | <b>12</b>   | 12                        |
| MTTF (operational hours)                        | <b>10000</b>  | 10000                     |
| Weight of Product or Laser Head (kg)            | <b>0.6</b>  | 2                         |
| Beam Height from Base Plate (mm)                | <b>24.8</b>   | 27.4                      |
| Dimensions of Product or Laser Head (mm)        | <b>140.8 (l) x 73 (w) x 46.2 (h)</b>                  | 197 (l) x 70 (w) x 50 (h) |

CW: All specifications are based on performance at full output power and after the specified warmup period. Output characteristics may change if the laser is run at a different power level.

Q-Switched: Specifications are based on the laser pulsing at the specified design frequency. Output characteristics may change if the laser is run at a different frequency.

## Power Supply Options:

These lasers are available with several different power supply options. The model that you have selected is highlighted below, and any other options are shown for easy reference.

|  | Power Supply Type:       | <b>FM</b>                         | <b>FO</b>                   |
|--|--------------------------|-----------------------------------|-----------------------------|
| FDA-Compliant LabSpec<br> | Input Power              | <b>85v to 264v</b>                | 85v to 264v                 |
|  | Power Supply Weight (kg) | <b>1.5</b>                        | 2.6                         |
|  | Dimensions (mm)          | <b>154 (l) x 155 (w) x 95 (h)</b> | 268 (l) x 145 (w) x 106 (h) |

\*Power supply may not be exactly as shown, see dimensional drawings on next 2 pages.

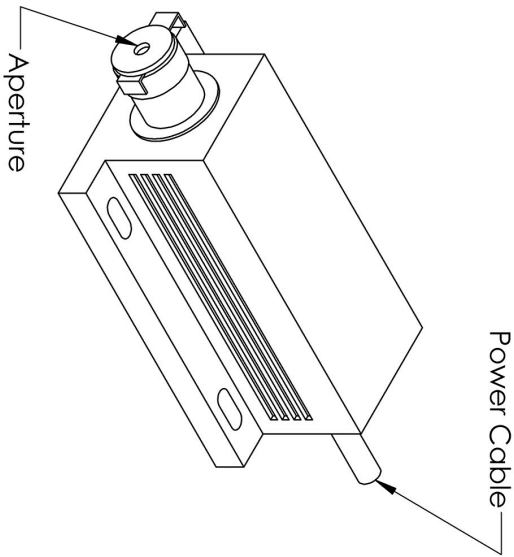
\*Dimensions for fiber-integrated (I\_) include laser head packaged inside.

## Regulatory Classification:

The model you have selected (L5A-M) requires the following safety label(s):



**Dimensional Drawing - Laser Form Factor: M:**



DETAIL A  
SCALE 1 : 1

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN MM(INCH)

TOLERANCES: +/- 0.75 MM

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF LASERGLOW TECHNOLOGIES. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF LASERGLOW TECHNOLOGIES IS PROHIBITED. © 2012 LASERGLOW.COM LIMITED. ALL RIGHTS RESERVED

Laserglow Technologies

TITLE:

Lab/OEM  
M/R Housing REV 1

SCALE: 1:2

SHEET 1 OF 1

**Dimensional Drawing - Power Supply Form Factor: FM:**



UNLESS OTHERWISE SPECIFIED:  
 DIMENSIONS ARE IN MM(INCH)  
 TOLERANCES: +/- 0.75 MM

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF LASERGLOW TECHNOLOGIES. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF LASERGLOW TECHNOLOGIES IS PROHIBITED. © 2012 LASERGLOW.COM LIMITED. ALL RIGHTS RESERVED

**Laserglow Technologies**

TITLE:

**Power Supply  
 FM/FR**








REV  
**1**

SCALE: 1:3

SHEET 1 OF 1

## Accessories:

The most popular accessories for model L5A-M are shown below. For additional details regarding these or other accessories please see our website or contact us directly.

| Part Number   | Description  |                     |
|---|--|---------------------|
| <br>AGF5327XX   | LSG-532-NF-7 Fit-Over Safety Goggles 532nm<br>Output: OD 7+ at 190-532 nm<br>CE Certified<br>Full Details: <a href="http://www.laserglow.com/AGF">www.laserglow.com/AGF</a>  |                     |
| <br>ACFVISHXA   | FC/PC Fiber Coupler/Collimator for visible spectrum wavelengths (400 to 700 nm)<br>(installed and aligned)<br>11mm diameter input lens<br>Full Details: <a href="http://www.laserglow.com/ACF">www.laserglow.com/ACF</a>   |                     |
| <br>ACSVISHXA   | SMA-905 Fiber Coupler/Collimator for visible spectrum wavelengths (400 to 700 nm)<br>(installed and aligned)<br>11mm diameter input lens<br>Full Details: <a href="http://www.laserglow.com/ACS">www.laserglow.com/ACS</a> |                     |
| <br>AFS2002XX   | Armored Fiber With SMA 905 Connectors 200um Core Multimode 2 m length<br>Full Details: <a href="http://www.laserglow.com/AFS">www.laserglow.com/AFS</a>  |                     |
| <br>AFF2002XX  | Armored Fiber With FC/PC Connectors 200um Core Multimode 2m length<br>Full Details: <a href="http://www.laserglow.com/AFF">www.laserglow.com/AFF</a>   |                     |
| <br>TBK       | Complete optics kits with breadboard mounting hardware.<br>External modulators, variable attenuators, free-space fiber launch systems<br>Full Details: <a href="http://www.laserglow.com/TBK">www.laserglow.com/TBK</a>    |                     |
| <br>ACALBMXXX | Carrying Case-102<br>Holds Lab/OEM M, R and S size, standard or LabSpec laser<br>Full Details: <a href="http://www.laserglow.com/ACA">www.laserglow.com/ACA</a>  | Included With Laser |

## FOR MORE INFORMATION PLEASE CONTACT:

LASERGLOW TECHNOLOGIES  
 99 Ingram Dr. Unit B, North York, ON, Canada M6M2L7  
 Tel. (416) 729-7976 Fax (716) 322-3510  
[sales@laserglow.com](mailto:sales@laserglow.com) [www.laserglow.com](http://www.laserglow.com)

E&OE: Data included in this sheet may be subject to change without notice.  
 Please confirm critical specifications with our staff prior to ordering.