

Laserglow Product Datasheet

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-O, per your request, and data for the entire series is also displayed for your reference. The specs which are specific to L5A-O have been highlighted below in **red + bold**.


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

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

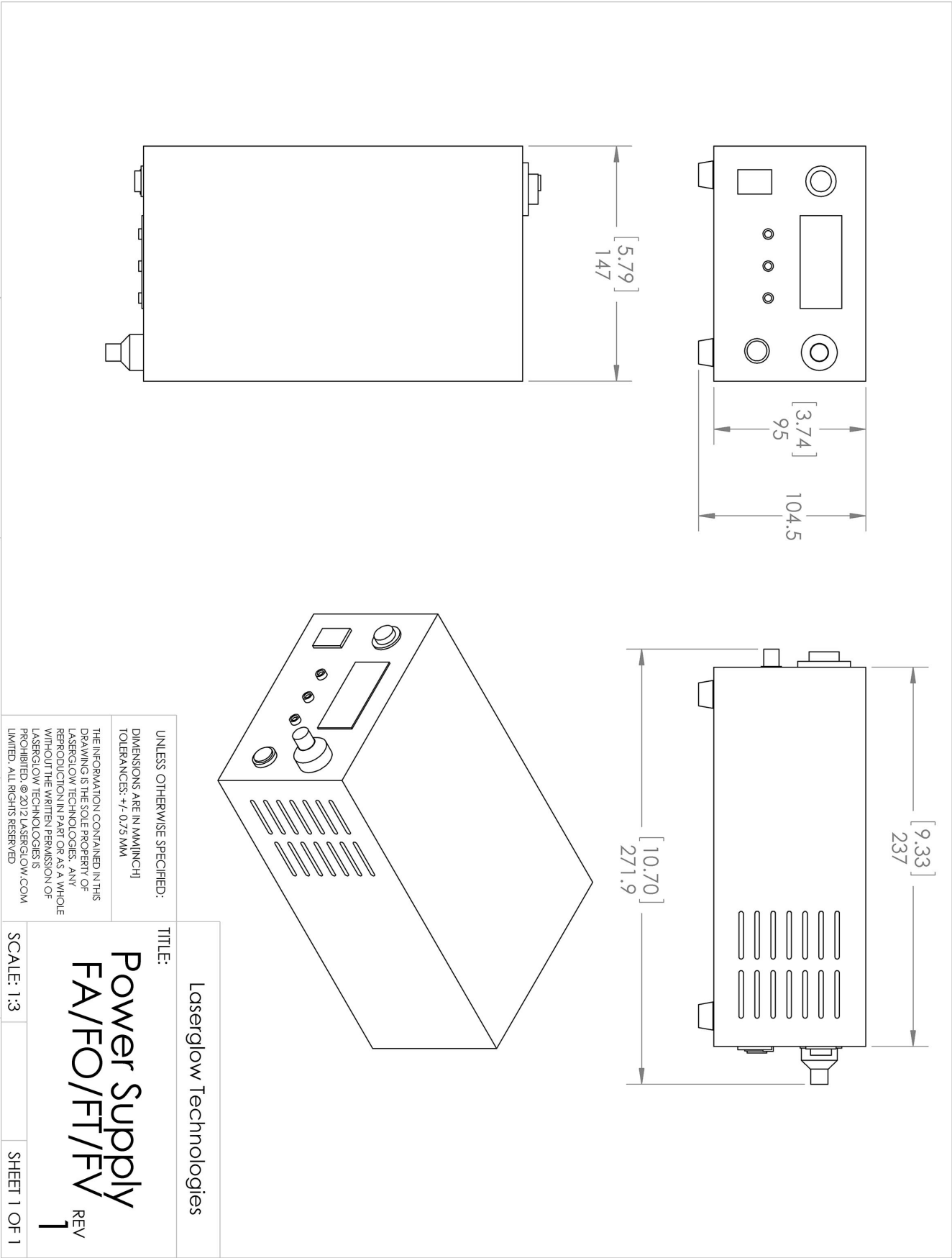
Regulatory Classification:

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












Dimensional Drawing - Power Supply Form Factor: FO:



Accessories:

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

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

FOR MORE INFORMATION PLEASE CONTACT:

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Please confirm critical specifications with our staff prior to ordering.