

## Arktis Laser Product Datasheet

### LLS-0604 Low-Noise DPSS Laser System



#### Series Specifications:

|                    |        |
|--------------------|--------|
| Nominal Wavelength | 604 nm |
| Output Type        | CW     |
| Laser Source Type  | DPSS   |

#### Overview:

The LLS-0604 Series of Low-Noise Diode-Pumped Solid-State (DPSS) Lasers are ideal for applications requiring less than 1% noise and output power levels from 10 mW to >50 mW. These 604 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 L60-O, per your request, and data for the entire series is also displayed for your reference. The specs which are specific to L60-O have been highlighted below in **red + bold**.


|  |                                  |
|--|----------------------------------|
| Output Power (mW)                        | <b>&gt;10, &gt;30, &gt;50</b>    |
| Output Power Stability (%RMS/4h)         | <b>&lt;1, &lt;3, &lt;5</b>       |
| Wavelength Tolerance (+/- nm)            | <b>3</b>                         |
| Divergence (mrad, full angle)            | <b>&lt;1</b>                     |
| Beam Dimensions (mm, 1/e <sup>2</sup> )  | <b>4</b>                         |
| Warm-up Time (minutes)                   | <b>5</b>                         |
| Operating Temperature Range (°C)         | <b>10 to 35</b>                  |
| Max. Power Input Duty Cycle              | <b>100%</b>                      |
| Standard Warranty (months)               | <b>12</b>                        |
| MTTF (operational hours)                 | <b>10000</b>                     |
| Weight of Product or Laser Head (kg)     | <b>2</b>                         |
| Beam Height from Base Plate (mm)         | <b>27.4</b>                      |
| Dimensions of Product or Laser Head (mm) | <b>197 (l) x 70 (w) x 50 (h)</b> |

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.

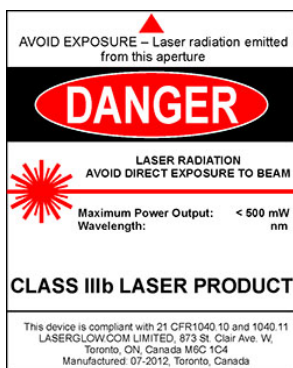
|   |                          |                                    |
|---|--------------------------|------------------------------------|
|  | Power Supply Type:       | <b>SO</b>                          |
|   | Input Power              | <b>85v to 264v</b>                 |
|   | Power Supply Weight (kg) | <b>2.3</b>                         |
|   | Dimensions (mm)          | <b>238 (l) x 146 (w) x 102 (h)</b> |

\*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.

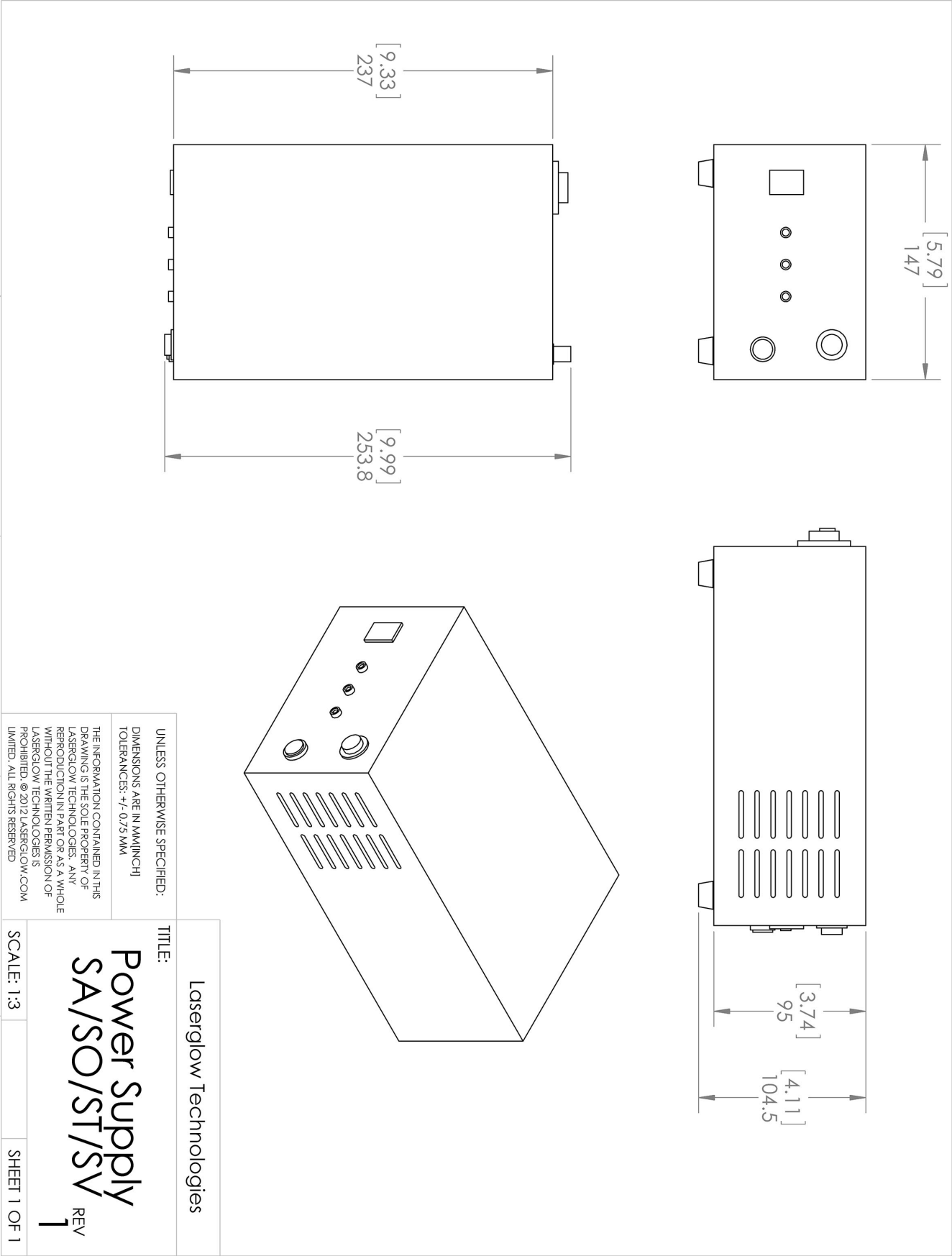
## Regulatory Classification:

The model you have selected (L60-O) requires the following safety label(s):












Dimensional Drawing - Power Supply Form Factor: SO:



## Accessories:

The most popular accessories for model L60-O are shown below. For additional details regarding these or other accessories please see our website or contact us directly.

| Part Number   | Description  |                     |
|---|--|---------------------|
| <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.arktislaser.com/ACF">www.arktislaser.com/ACF</a>   |                     |
| <br>AFF2002XX  | Armored Fiber With FC/PC Connectors 200um Core Multimode 2m length<br>Full Details: <a href="http://www.arktislaser.com/AFF">www.arktislaser.com/AFF</a>   |                     |
| <br>AFS2002XX  | Armored Fiber With SMA 905 Connectors 200um Core Multimode 2 m length<br>Full Details: <a href="http://www.arktislaser.com/AFS">www.arktislaser.com/AFS</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.arktislaser.com/ACS">www.arktislaser.com/ACS</a> |                     |
| <br>ACALBHFXX | Carrying Case-103<br>Holds Lab/OEM H, F and O size Standard/LabSpec laser<br>Full Details: <a href="http://www.arktislaser.com/ACA">www.arktislaser.com/ACA</a>  | Included With Laser |
| <br>AGF6605XX | LSG-660-NF-5 Fit-Over Safety Goggles 660nm<br>Output: OD 5+ at 600-694 nm<br>CE Certified<br>Full Details: <a href="http://www.arktislaser.com/AGF">www.arktislaser.com/AGF</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.arktislaser.com/TBK">www.arktislaser.com/TBK</a>    |                     |

## FOR MORE INFORMATION PLEASE CONTACT:

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E&OE: Data included in this sheet may be subject to change without notice.

Please confirm critical specifications with our staff prior to ordering.