

# **Arktis Laser Product Datasheet**

# LRS-0604 DPSS Laser System



## **Series Specifications:**

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

#### Overview:

The LRS-0604 Series of Diode-Pumped Solid-State (DPSS) Lasers are ideal for applications requiring 10 mW to >50 mW of 604 nm laser light with long-term output power stability of 10%, 5% or 3% as well as a 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.

Available with on-board as well as remote on/off control, and in a wide array of output power and stability levels, Laserglow products are currently being used by some of the World's top universities and other prominent research facilities.

## **Key Features:**

- 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
- TTL and Analog modulation (input via BNC connector) lab-spec models only
- Adjustable output power (via lockable dial) lab-spec models only
- LED display showing LD current, laser cavity temperature lab-spec models only
- 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
- BNC Connector (LabSpec models only)
- · Keys, Safety Interlock
- Hard-shell Carrying Case

## Specifications:

This spec sheet has been generated specifically for part number R60-O, per your request, and data for the entire series is also displayed for your reference. The specs which are specific to R60-O have been highlighted below in **red + bold**.

| 0  |                           |
|--|---------------------------|
| Output Power (mW)                              | >10, >30, >50, >80        |
| Output Power<br>Stability (%RMS/4h)            | <1, <3, <5, <10           |
| Wavelength Tolerance (+/- nm)                  | 3                         |
| Divergence (mrad, full angle)                  | <1                        |
| Beam Dimensions (mm, 1/e²)                     | 4                         |
| Warm-up Time (minutes)                         | 5                         |
| Operating<br>Temperature Range<br>(°C)         | 10 to 35                  |
| Max. Analog<br>Modulation Freq.<br>(Hz)        | 30000                     |
| Max. TTL<br>Modulation Freq.<br>(Hz)           | 10000, 30000              |
| Modulation Input<br>Signal                     | 0-5 VDC                   |
| Max. Power Input<br>Duty Cycle                 | 100%                      |
| Standard Warranty (months)                     | 12                        |
| MTTF (operational hours)                       | 10000                     |
| Weight of Product or<br>Laser Head (kg)        | 2                         |
| Beam Height from<br>Base Plate (mm)            | 27.4                      |
| Dimensions of<br>Product or Laser<br>Head (mm) | 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:          | FO                             |
|-----------------------|-----------------------------|--------------------------------|
| FDA-Compliant LabSpec | Input Power                 | 85v to 264v                    |
|                       | Power Supply<br>Weight (kg) | 2.6                            |
|                       | Dimensions (mm)             | 268 (I) x 145 (w) x<br>106 (h) |

|                        | Power Supply Type:          | so                             |
|------------------------|-----------------------------|--------------------------------|
| FDA-Compliant Standard | Input Power                 | 85v to 264v                    |
|                        | Power Supply<br>Weight (kg) | 2.3                            |
|                        | Dimensions (mm)             | 238 (I) x 146 (w) x<br>102 (h) |

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

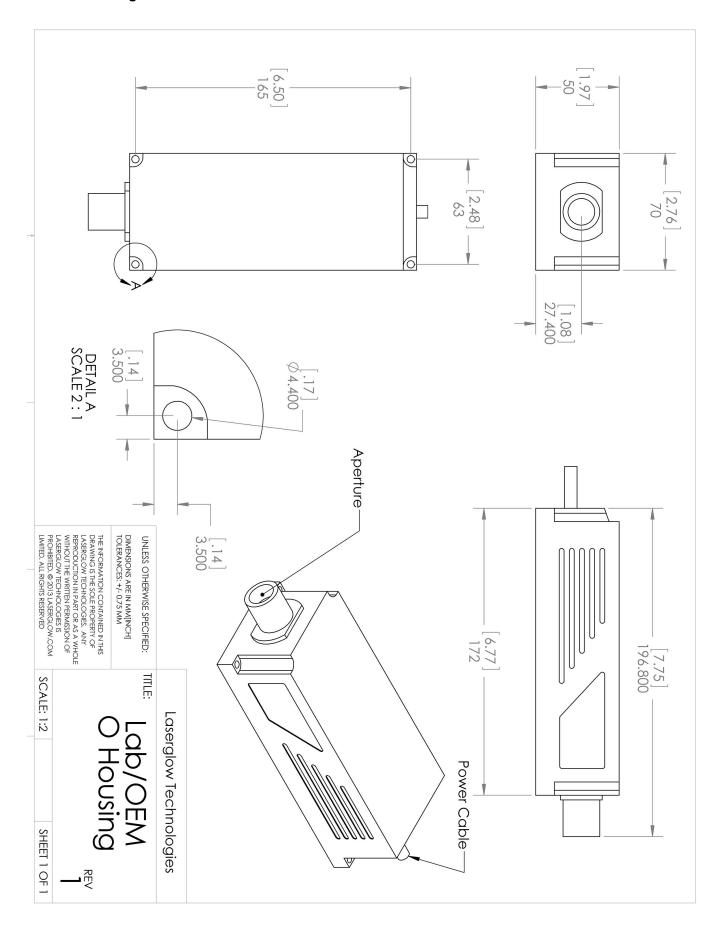
## **Regulatory Classification:**

The model you have selected (R60-O) requires the following safety label(s):

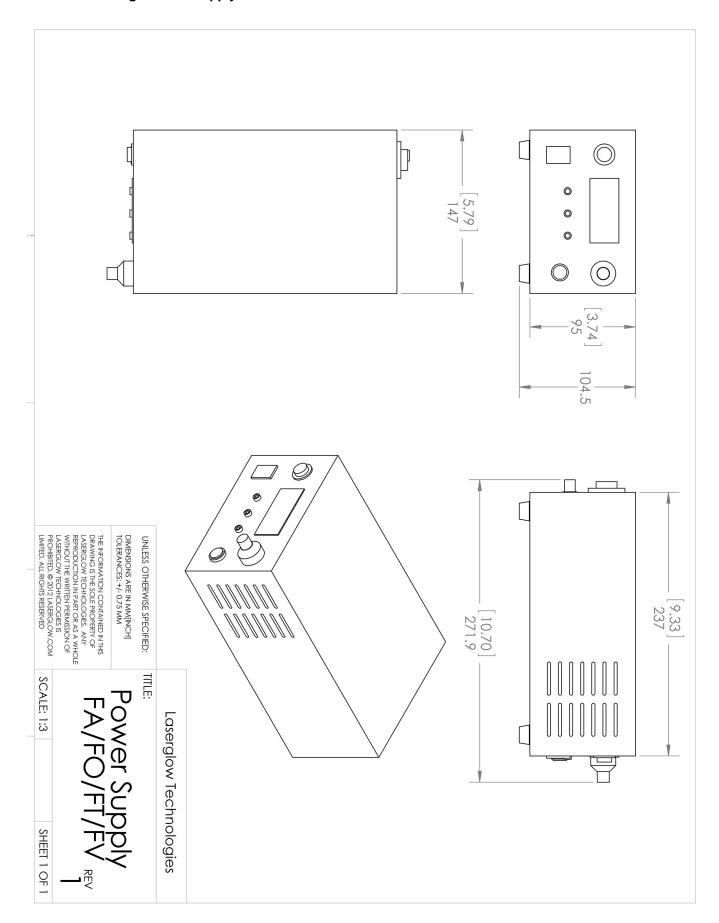


<sup>\*</sup>Dimensions for fiber-integrated (I\_) include laser head packaged inside.

# **Dimensional Drawing - Laser Form Factor: 0:**



# **Dimensional Drawing - Power Supply Form Factor: FO:**



#### **Accessories:**

The most popular accessories for model R60-O are shown below. For additional details regarding these or other accessories please see our website or contact us directly.

| Part Number | Description  |                     |
|-------------|--|---------------------|
| ACFVISHXA   | FC/PC Fiber Coupler/Collimator for visible spectrum wavelengths (400 to 700 nm) (installed and aligned) 11mm diameter input lens Full Details: <a href="https://www.arktislaser.com/ACF">www.arktislaser.com/ACF</a>     |                     |
| AFF2002XX   | Armored Fiber With FC/PC Connectors 200um Core Multimode 2m length Full Details: <a href="https://www.arktislaser.com/AFF">www.arktislaser.com/AFF</a>   |                     |
| AFS2002XX   | Armored Fiber With SMA 905 Connectors 200um Core Multimode 2 m length Full Details: <a href="https://www.arktislaser.com/AFS">www.arktislaser.com/AFS</a>  |                     |
| ACSVISHXA   | SMA-905 Fiber Coupler/Collimator for visible spectrum wavelengths (400 to 700 nm) (installed and aligned) 11mm diameter input lens Full Details: <a href="https://www.arktislaser.com/ACS">www.arktislaser.com/ACS</a>   |                     |
| ACALBHFXX   | Carrying Case-103 Holds Lab/OEM H, F and O size Standard/LabSpec laser Full Details: <a href="https://www.arktislaser.com/ACA">www.arktislaser.com/ACA</a>   | Included With Laser |
| AGF6605XX   | LSG-660-NF-5 Fit-Over Safety Goggles 660nm Output: OD 5+ at 600-694 nm CE Certified Full Details: www.arktislaser.com/AGF  |                     |
| TBK         | Complete optics kits with breadboard mounting hardware.  External modulators, variable attenuators, free-space fiber launch systems  Full Details: <a href="https://www.arktislaser.com/TBK">www.arktislaser.com/TBK</a> |                     |

# FOR MORE INFORMATION PLEASE CONTACT:

Arktis Laser
112 Elizabeth St, Unit 5-331, Toronto, ON, Canada M5G 1P5
Tel. 1-416-886-1178 Fax 1-647-874-7129
sales@arktislaser.com www.arktislaser.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.