# Laserglow Product Datasheet

## LRS-0480 DPSS Laser System

## Laserglow Part Number: R48030XSX

This model is listed as **inactive** in our product database. Stock may be limited, and availability is subject to change without notice.




### Similar Products:

For information about the other lasers in this product family visit:

http://www.laserglow.com/R48

### Ordering:

Order Online Now or Request Quote:

http://www.laserglow.com/R48030XSX

### Series Specifications:

| | |
|---|---|
| Nominal Wavelength | 480 nm |
| Output Type | CW |
| Laser Source Type | DPSS |

### Overview:

The LRS-0480 Series of Diode-Pumped Solid-State (DPSS) Lasers are ideal for applications which specifically require 480 nm light with power levels from 5 mW to >150 mW.

These lasers are commonly used for fluorescence excitation, Raman Spectroscopy and a broad range 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 TTL and Analog modulation, 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
- 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 R48030XSX, per your request, and data for the entire series is also displayed for your reference. The specs which are specific to R48030XSX have been highlighted below in **red + bold**.

| | | |
|---|---|---|
| Output Power (mW) | **>30** | >50, >100, >150 |
| Output Power Stability (%RMS/4h) | **<10** | <3, <5 |
| Wavelength Tolerance (+/- nm) | **1** | 1 |
| Divergence (mrad, full angle) | **<1.5** | <1.5 |
| Beam Dimensions (mm, $1/e^2$) | **3** | 3 |
| Warm-up Time (minutes) | **10** | 10 |
| $M^2$ | **<3** | |
| Polarization Ratio | **>100** | >100 |
| Beam Pointing Stability (mrad) | **<0.05** | |
| Operating Temperature Range (°C) | **10 to 35** | 10 to 35 |
| Max. Analog Modulation Freq. (Hz) | | 30000 |
| Max. TTL Modulation Freq. (Hz) | **10000** | 30000 |
| Modulation Input Signal | **0-5 VDC** | 0-5 VDC |
| Max. Power Input Duty Cycle | **100%** | 100% |
| Standard Warranty (months) | **12** | 12 |
| MTTF (operational hours) | **10000** | 10000 |
| Weight of Product or Laser Head (kg) | **0.9** | 2.6 |
| Beam Height from Base Plate (mm) | **29** | 68.2 |
| Dimensions of Product or Laser Head (mm) | **155 (l) x 77 (w) x 60 (h)** | 240 (l) x 99 (w) x 94 (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.

| | | |
|---|---|---|
| FDA-Compliant Standard  | Power Supply Type: | **SH** |
| | Input Power | **85v to 264v** |
| | Power Supply Weight (kg) | **2.3** |
| | Dimensions (mm) | **238 (l) x 146 (w) x 102 (h)** |

| | | |
|---|---|---|
| FDA-Compliant LabSpec  | Power Supply Type: | **FN** |
| | Input Power | 85v to 264v |
| | Power Supply Weight (kg) | 2.6 |
| | Dimensions (mm) | 268 (l) x 145 (w) x 106 (h) |

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

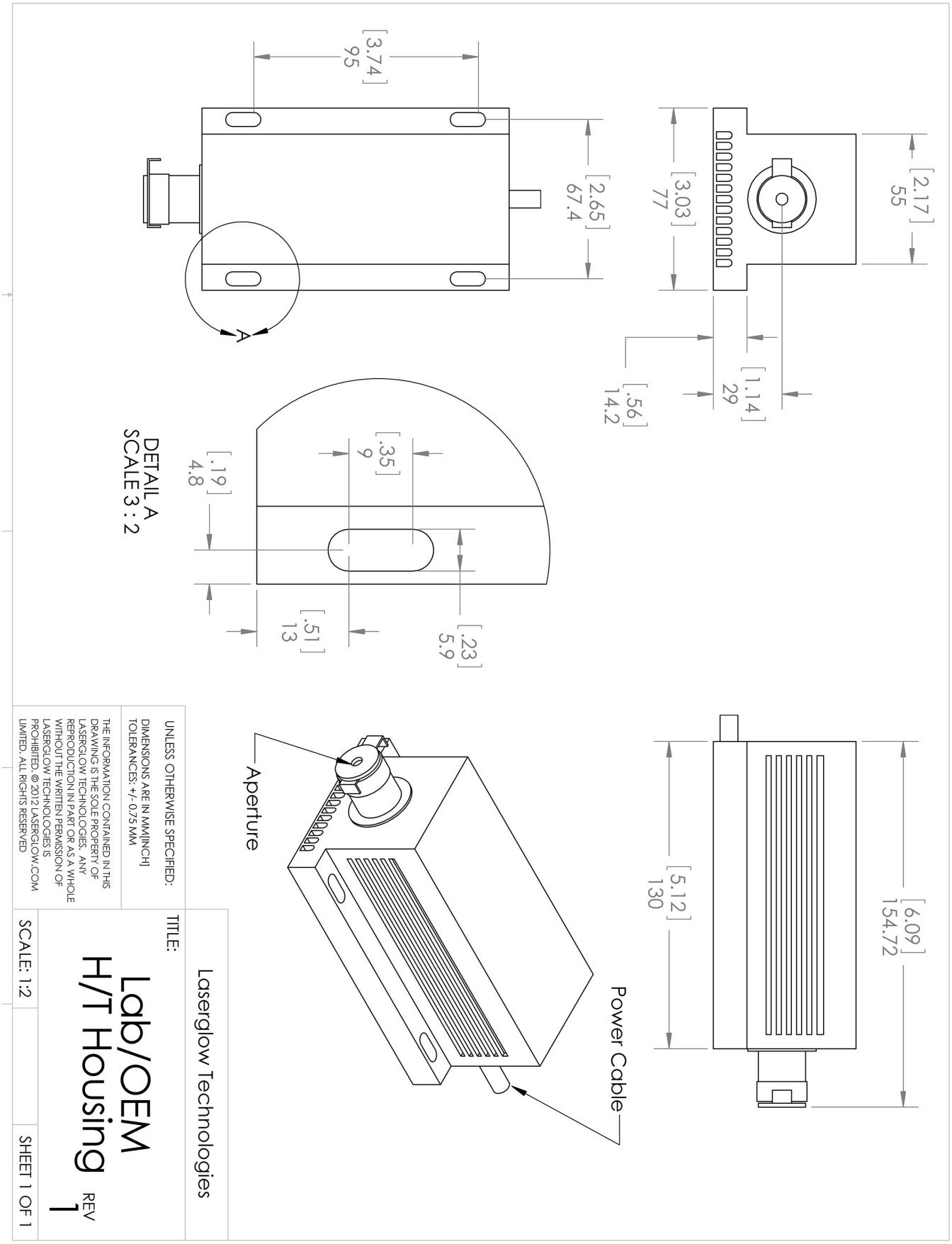
*Dimensions for fiber-integrated (I_) include laser head packaged inside.

## Regulatory Classification:

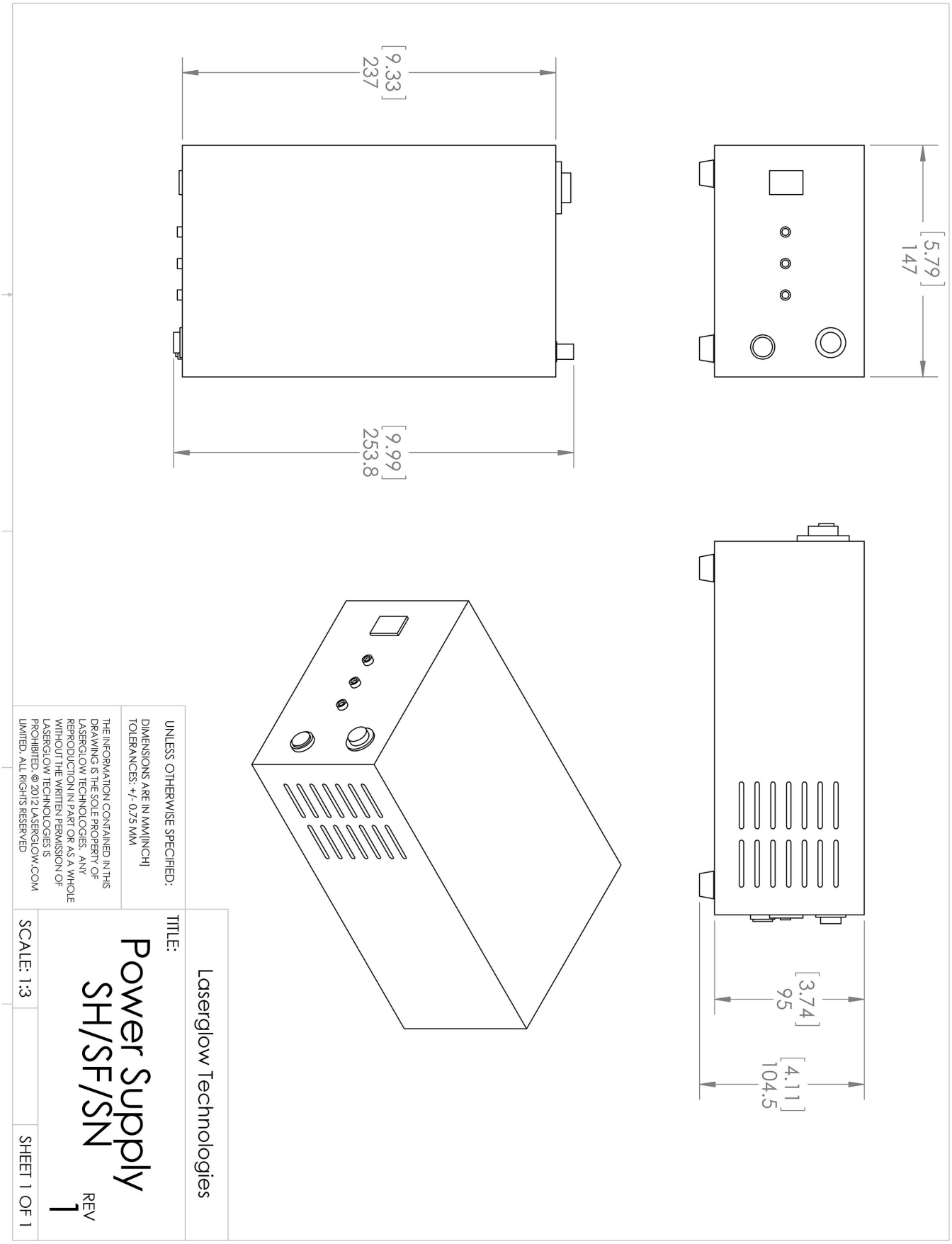
The model you have selected (R48030XSX) requires the following safety label(s):



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



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



## Accessories:

The most popular accessories for model R48030XSX are shown below. For additional details regarding these or other accessories please see our website or contact us directly.

| Part Number | Description | |
|---|---|---|
|  AFF2002XX | Armored Fiber With FC/PC Connectors 200um Core Multimode 2m length<br>Full Details: www.laserglow.com/AFF | |
|  AFS2002XX | Armored Fiber With SMA 905 Connectors 200um Core Multimode 2 m length<br>Full Details: www.laserglow.com/AFS | |
|  AGF5327XX | LSG-532-NF-7 Fit-Over Safety Goggles 532nm<br>Output: OD 7+ at 190-532 nm<br>CE Certified<br>Full Details: www.laserglow.com/AGF | |
|  ACFVISHXA | FC/PC Fiber Coupler/Collimator for visible spectrum wavelengths (400 to 700 nm) (installed and aligned)<br>11mm diameter input lens<br>Full Details: www.laserglow.com/ACF | |
|  ACSVISHXA | SMA-905 Fiber Coupler/Collimator for visible spectrum wavelengths (400 to 700 nm) (installed and aligned)<br>11mm diameter input lens<br>Full Details: www.laserglow.com/ACS | |
|  TBK | Complete optics kits with breadboard mounting hardware.<br>External modulators, variable attenuators, free-space fiber launch systems<br>Full Details: www.laserglow.com/TBK | |
|  ACALBHFXX | Carrying Case-103<br>Holds Lab/OEM H, F and O size Standard/LabSpec laser<br>Full Details: www.laserglow.com/ACA | 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 www.laserglow.com

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Please confirm critical specifications with our staff prior to ordering.