

## **Laserglow Product Datasheet**

## LRS-1030 DPSS Laser System

# Laserglow Part Number: RA3100XSX

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/RA3

#### Ordering:

Order Online Now or Request Quote:

http://www.laserglow.com/RA3100XSX

#### **Series Specifications:**

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Nominal Wavelength	1030 nm	
Output Type	CW	
Laser Source Type	DPSS	



#### Overview:

The LRS-1030 Series of Diode-Pumped Solid-State (DPSS) Lasers are ideal for applications requiring 10 mW to >100 mW of 1030 nm laser light with a high level of long-term output power stability and long operating lifetime at an aggressively competitive cost.

These lasers are commonly used for various scientific applications such as measurement, communications research, spectral analysis, 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 both on-board and remote on/off control as well as 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 RA3100XSX, per your request, and data for the entire series is also displayed for your reference. The specs which are specific to RA3100XSX have been highlighted below in **red + bold**.

Output Power (mW)	>50, <b>&gt;100</b> , >300, >500, >600
Output Power Stability (%RMS/4h)	<1, <3, <5, <b>&lt;10</b>
Wavelength Tolerance (+/- nm)	1
Divergence (mrad, full angle)	<2
Beam Dimensions (mm, 1/e²)	3
Warm-up Time (minutes)	10
M²	<1.5
Beam Pointing Stability (mrad)	<0.05
Operating Temperature Range (°C)	10 to 35
Max. Analog Modulation Freq. (Hz)	500
Max. TTL Modulation Freq. (Hz)	500
Modulation Input Signal	0-5 VDC
Max. Power Input Duty Cycle	100%
Standard Warranty (months)	12
MTTF (operational hours)	10000
Weight of Product or Laser Head (kg)	1.6
Beam Height from Base Plate (mm)	45
Dimensions of Product or Laser Head (mm)	211.5 (l) x 88 (w) x 74 (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:	FF
FDA-Compliant LabSpec	Input Power	85v to 264v
	Power Supply Weight (kg)	2.6
	Dimensions (mm)	268 (I) x 145 (w) x 106 (h)

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

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

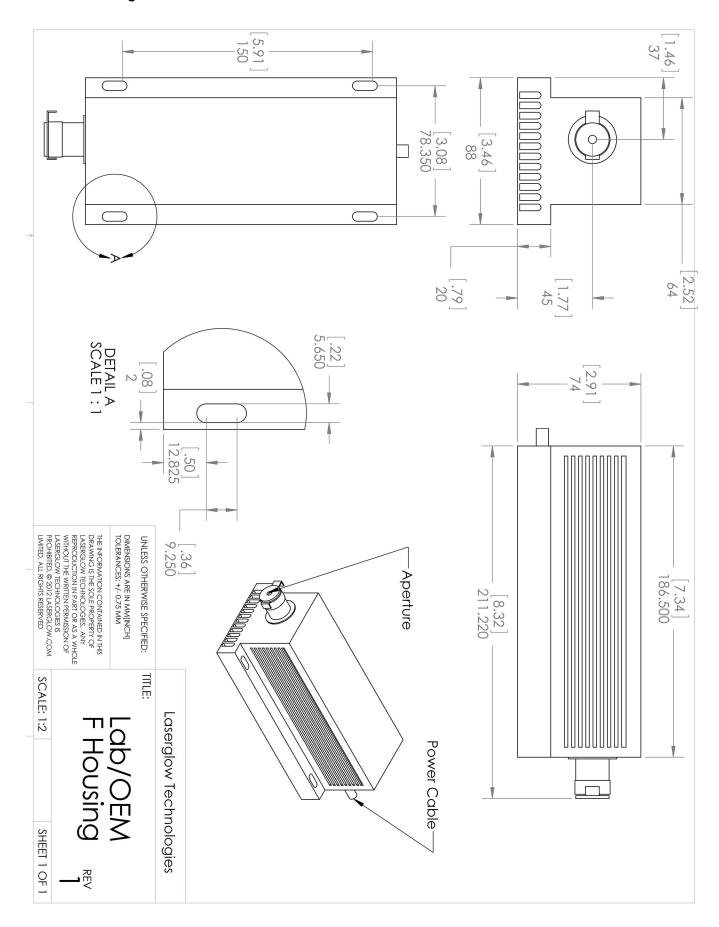
## **Regulatory Classification:**

The model you have selected (RA3100XSX) requires the following safety label(s):

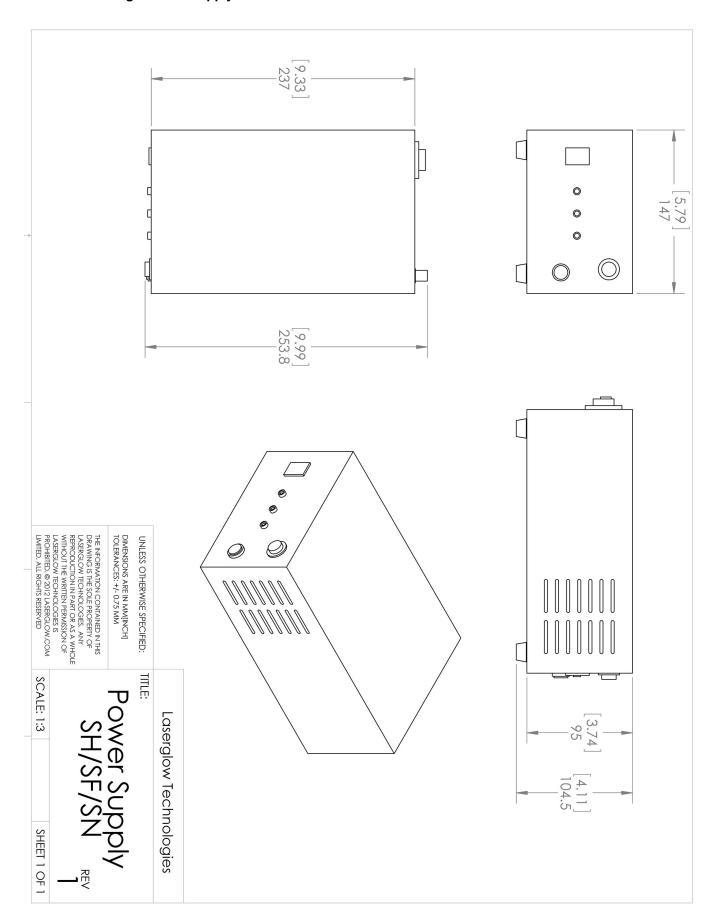


<sup>\*</sup>Dimensions for fiber-integrated (I\_) include laser head packaged inside.

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



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



#### **Accessories:**

The most popular accessories for model RA3100XSX are shown below. For additional details regarding these or other accessories please see our website or contact us directly.

Part Number	Description	
ACALBHEXX	Carrying Case-103 Holds Lab/OEM H, F and O size Standard/LabSpec laser Full Details: <a href="https://www.laserglow.com/ACA">www.laserglow.com/ACA</a>	Included With Laser
AGFA647XX	LSG-1064-NF-7 Fit-Over Safety Goggles 1064nm Output: OD 7+ at 950-1070 nm CE Certified Full Details: www.laserglow.com/AGF	
ACFMIRHXA	FC/PC Fiber Coupler/Collimator for IR wavelengths (1000 to 1300 nm) (installed and aligned) 11mm diameter input lens Full Details: <a href="https://www.laserglow.com/ACF">www.laserglow.com/ACF</a>	
ACSMIRHXA	SMA-905 Fiber Coupler/Collimator for IR wavelengths (1000 to 1300 nm) (installed and aligned) 11mm diameter input lens Full Details: <a href="https://www.laserglow.com/ACS">www.laserglow.com/ACS</a>	
AFF2002XX	Armored Fiber With FC/PC Connectors 200um Core Multimode 2m length Full Details: <a href="https://www.laserglow.com/AFF">www.laserglow.com/AFF</a>	
AFS2002XX	Armored Fiber With SMA 905 Connectors 200um Core Multimode 2 m length Full Details: <a href="https://www.laserglow.com/AFS">www.laserglow.com/AFS</a>	
TBK	Complete optics kits with breadboard mounting hardware.  External modulators, variable attenuators, free-space fiber launch systems  Full Details: <a href="https://www.laserglow.com/TBK">www.laserglow.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.