# Laserglow Product Datasheet

## LCS-0532 Low-Cost DPSS Laser System

## Laserglow Part Number: C530155FX




### Similar Products:

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

http://www.laserglow.com/C53

### Ordering:

Order Online Now or Request Quote:

http://www.laserglow.com/C530155FX

### Series Specifications:

| | |
|---|---|
| Nominal Wavelength | 532 nm |
| Output Type | CW |
| Laser Source Type | DPSS |

### Overview:

The LCS-0532 Series of Diode-Pumped Solid-State (DPSS) Lasers are ideal for applications requiring up to 200 mW of 532 nm laser light at the lowest cost possible while maintaining high quality and a long operating life.

These lasers are commonly used for general illumination and fluorescence excitation. 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:**

- 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)
- Also available in 5/12 VDC power supply
- >5,000 hours continuous maintenance-free operating life
- 6 month warranty
- TTL modulation
- 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

- Detachable TTL wires (on applicable models)
- Keys, Safety Interlock (FDA power supplies only)
- Hard-shell Carrying Case

## Specifications:

This spec sheet has been generated specifically for part number C530155FX, per your request, and data for the entire series is also displayed for your reference. The specs which are specific to C530155FX have been highlighted below in **red + bold**.

| | | |
|---|---|---|
| Output Power (mW) | **>15**, >35, >50 | >80, >100 |
| Output Power Stability (%RMS/4h) | **<5**, <10 | <5, <10 |
| Central Wavelength (nm) | **531.65** | 531.65 |
| Wavelength Tolerance (+/- nm) | **1** | 1 |
| Divergence (mrad, full angle) | **<1.2** | <1.2 |
| Beam Dimensions (mm, 1/e²) | **1.5** | 1.5 |
| Warm-up Time (minutes) | **10** | 10 |
| Optical Noise Amplitude (%RMS @ 20 Hz - 20 MHz) | **<20** | <20 |
| $M^2$ | **<1.48** | <1.48 |
| Beam Pointing Stability (mrad) | **<0.05** | <0.05 |
| Operating Temperature Range (°C) | **10 to 35** | 15 to 35 |
| Max. TTL Modulation Freq. (Hz) | **10000** | 10000 |
| Modulation Input Signal | **0-5 VDC** | 0-5 VDC |
| Total Power Consumption (W) | 10 | 35 |
| Max. Power Input Duty Cycle | **100%** | 100% |
| Standard Warranty (months) | **6** | 6 |
| MTTF (operational hours) | **5000** | 5000 |
| Weight of Product or Laser Head (kg) | **0.2** | 0.2 |
| Beam Height from Base Plate (mm) | **15** | 15 |
| Dimensions of Product or Laser Head (mm) | **77 (l) x 30 (w) x 30 (h)** | 87 (l) x 40 (w) x 40 (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:

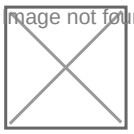
These lasers are available with several different power supply options. The model that you have selected is highlighted below, and any other options are shown for easy reference.

| | Power Supply Type: | **1C** | **1D** |
|---|---|---|---|
| OEM 12 Volt DC  | Input Power | 0v to 12v | 0v to 12v |
| | Power Supply Weight (kg) | 0.2 | 0.2 |
| | Dimensions (mm) | 115 (l) x 59 (w) x 34 (h) | 115 (l) x 59 (w) x 34 (h) |

| | Power Supply Type: | **5C** | **5D** |
|---|---|---|---|
| OEM 5 Volt DC  | Input Power | 0v to 5v | 0v to 5v |
| | Power Supply Weight (kg) | 0.1 | 0.1 |
| | Dimensions (mm) | 110 (l) x 47 (w) x 30 (h) | 110 (l) x 47 (w) x 30 (h) |

| | Power Supply Type: | **OC** | **OD** |
|---|---|---|---|
| OEM AC  | Input Power | 85v to 264v | 85v to 264v |
| | Power Supply Weight (kg) | 0.14 | 0.14 |
| | Dimensions (mm) | 90 (l) x 47 (w) x 37 (h) | 90 (l) x 47 (w) x 37 (h) |

| | Power Supply Type: | **SC** | **SD** |
|---|---|---|---|
| FDA-Compliant Standard  | Input Power | **85v to 264v** | 85v to 264v |
| | Power Supply Weight (kg) | **1.2** | 1.2 |
| | Dimensions (mm) | **133 (l) x 130 (w) x 65 (h)** | 133 (l) x 130 (w) x 65 (h) |

| | Power Supply Type: | **DD** |
|---|---|---|
| OEM 5/12 Volt DC   | Input Power | 5v to 12v |
| | Power Supply Weight (kg) | 0.2 |
| | Dimensions (mm) | 115 (l) x 59 (w) x 34 (h) |

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

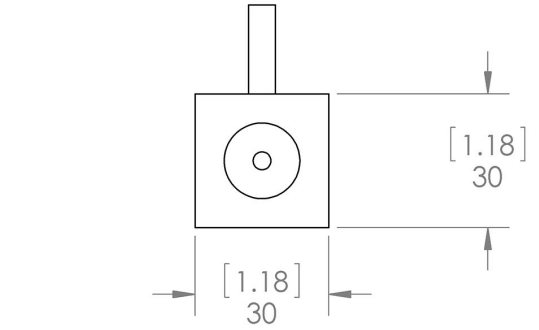
*Dimensions for fiber-integrated (I_) include laser head packaged inside.

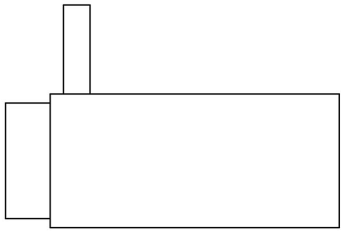
## Regulatory Classification:

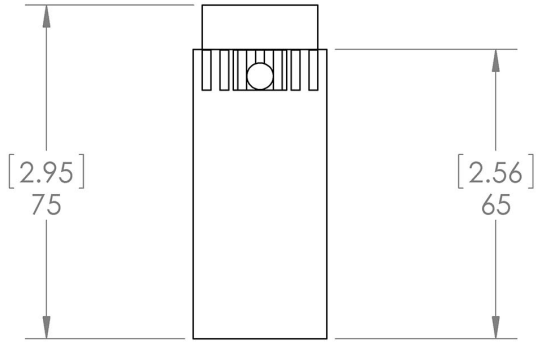
The model you have selected (C530155FX) requires the following safety label(s):

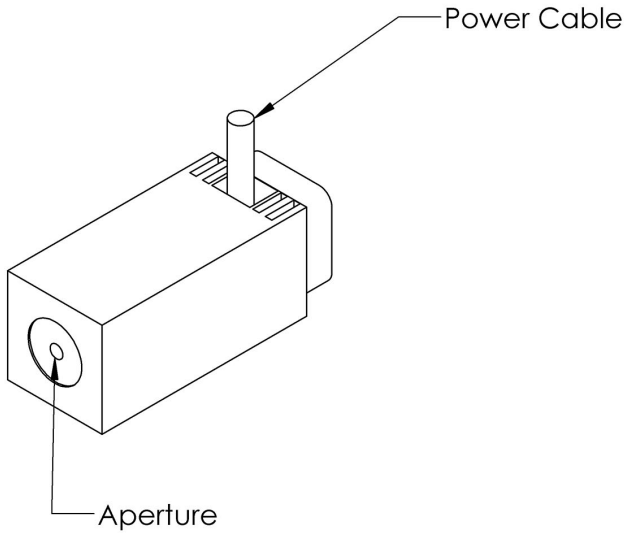

AVOID EXPOSURE – Laser radiation emitted from this aperture
DANGER
LASER RADIATION
AVOID DIRECT EXPOSURE TO BEAM
Maximum Power Output: < 500 mW
Wavelength: 532 nm
CLASS IIIb LASER PRODUCT
This device is compliant with 21 CFR1040.10 and 1040.11
LASERGLOW.COM LIMITED, 873 St. Clair Ave. W,
Toronto, ON, Canada M6C 1C4
Manufactured: 07-2012, Toronto, Canada

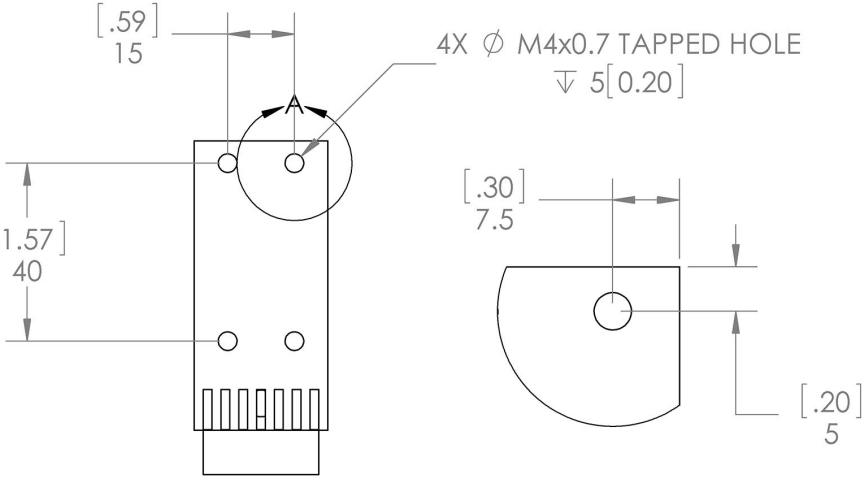
**Dimensional Drawing - Laser Form Factor: C:**









DETAIL A
SCALE 4 : 3

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN MM[INCH]
TOLERANCES: +/- 0.75 MM

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF LASERGLOW TECHNOLOGIES. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF LASERGLOW TECHNOLOGIES IS PROHIBITED. © 2012 LASERGLOW.COM LIMITED. ALL RIGHTS RESERVED

Laserglow Technologies

TITLE:

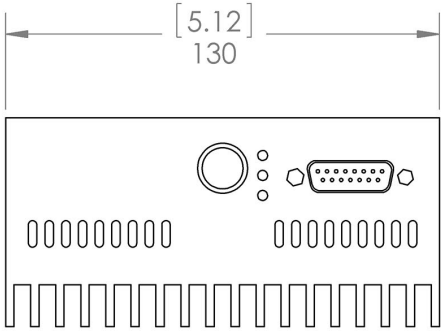
# LAB/OEM "C" Housing

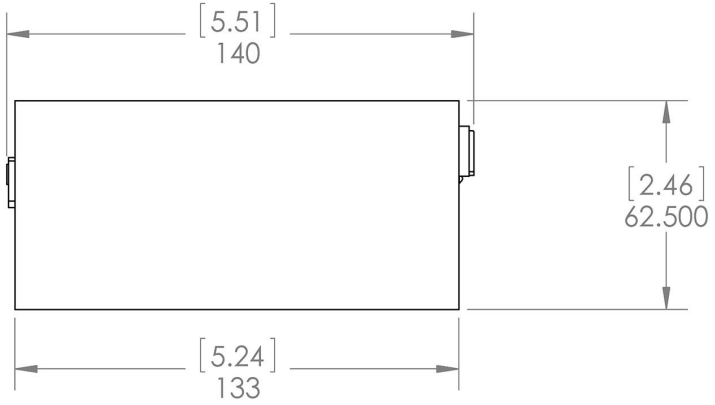
REV 1

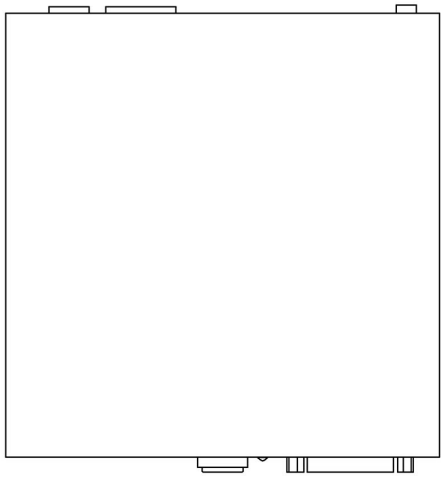
SCALE: 2:3

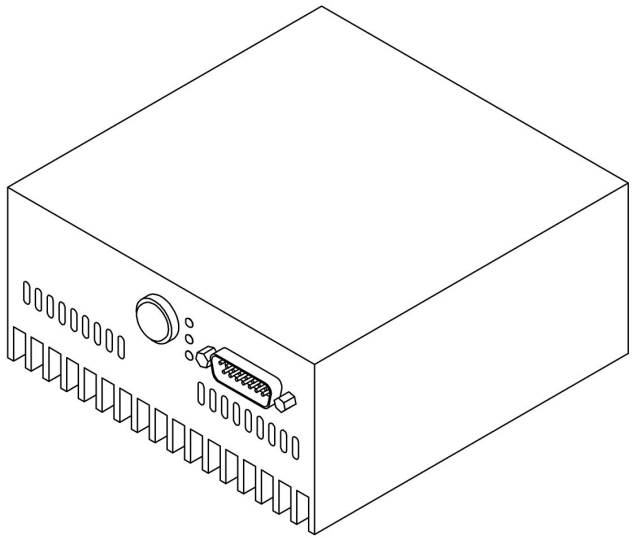
SHEET 1 OF 1

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





Laserglow Technologies

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN MM[INCH]
TOLERANCES: +/- 0.75 MM

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF LASERGLOW TECHNOLOGIES. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF LASERGLOW TECHNOLOGIES IS PROHIBITED. © 2012 LASERGLOW.COM LIMITED. ALL RIGHTS RESERVED

TITLE:

# Power Supply SC/SD/SG

REV 1

SCALE: 1:2

SHEET 1 OF 1

## Accessories:

The most popular accessories for model C530155FX 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<br>Output: OD 7+ at 190-532 nm<br>CE Certified<br>Full Details: www.laserglow.com/AGF | |
|  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 | |
|  ACALBLCSX | Carrying Case-101<br>Lab/OEM - C or D/OEM or FDA<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

E&OE: Data included in this sheet may be subject to change without notice.
Please confirm critical specifications with our staff prior to ordering.