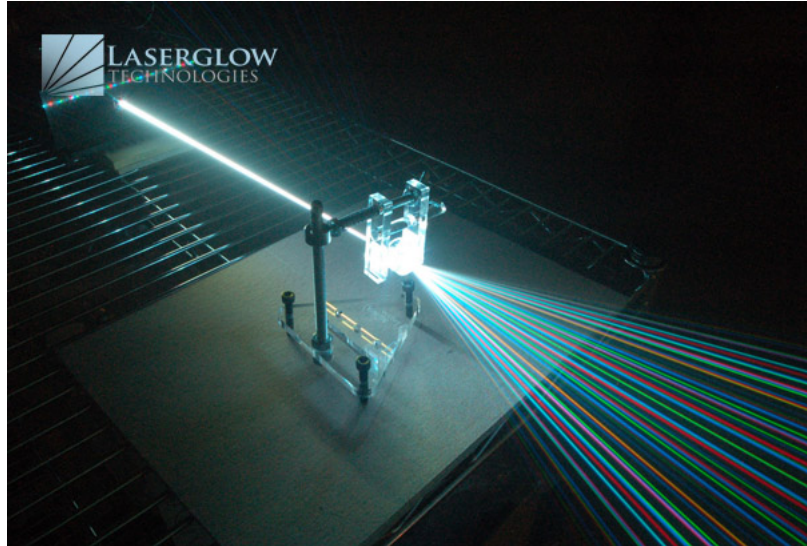


Arktis Laser Product Datasheet

LMS-RGB1 Combined Triple-Wavelength Laser System



Series Specifications:

| | |
|--------------------|------------------------|
| Nominal Wavelength | 473 nm, 532 nm, 671 nm |
| Output Type | CW |
| Laser Source Type | DPSS |

Overview:

The LMS-RGB1 Series of Combined-wavelength Diode-Pumped Solid-State (DPSS) Lasers are ideal for applications requiring red, green, and blue wavelengths to be emitted from a single laser module- simultaneously or individually. These RGB laser systems are available in up to 500 mW combined output 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 laser light shows (entertainment) as well as a variety of scientific applications including, 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 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 / 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 M31-3, per your request. Each column represents the specifications of the individual component lasers that make up the multi-wavelength system.


| | | | |
|---|---------|---------|---------|
| Component Laser Wavelength (nm) | 473 | 532 | 671 |
| Output Power (mW) | >200 | >200 | >200 |
| Output Power Stability (%RMS/4h) | <3 | <3 | <3 |
| Divergence (mrad, full angle) | <1.5 | <1.5 | <1.5 |
| Beam Dimensions (mm, 1/e ²) | 3 | 2 | 1.2 |
| M ² | <2 | <1.2 | <1.2 |
| Max. Analog Modulation Freq. (Hz) | 30000 | 30000 | 30000 |
| Max. TTL Modulation Freq. (Hz) | 30000 | 30000 | 30000 |
| Modulation Input Signal | 0-5 VDC | 0-5 VDC | 0-5 VDC |
| Total Power Consumption (W) | 80 | 32 | 35 |
| Max. Power Input Duty Cycle | 100% | 100% | 100% |
| Standard Warranty (months) | 12 | 12 | 12 |
| MTTF (operational hours) | 10000 | 10000 | 10000 |

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 | FM |
|--|--------------------------|-----------------------------|-----------------------------------|
| FDA-Compliant LabSpec  | Input Power | 85v to 264v | 85v to 264v |
| | Power Supply Weight (kg) | 2.6 | 1.5 |
| | Dimensions (mm) | 268 (l) x 145 (w) x 106 (h) | 154 (l) x 155 (w) x 95 (h) |

Multi-wavelength lasers include a separate power supply for each wavelength. In some cases the power supply for each wavelength may be slightly different in size. If the dimensions of the power supply are a concern for you please inquire with us before placing your order.

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

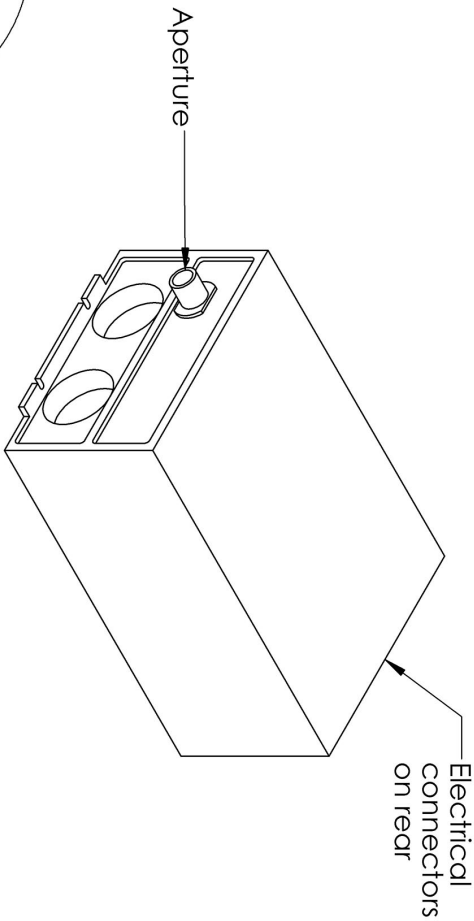
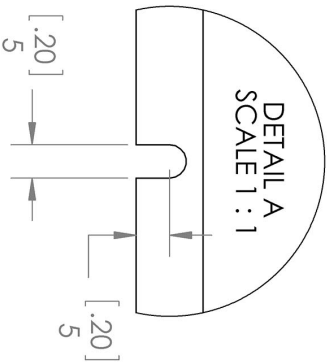
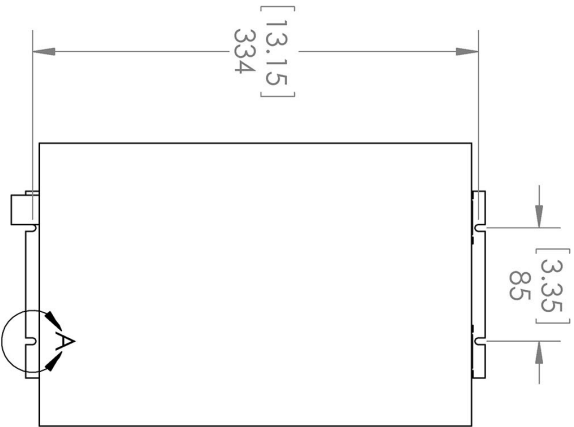
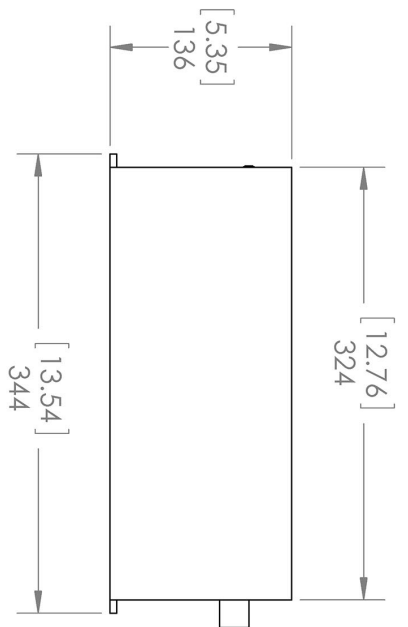
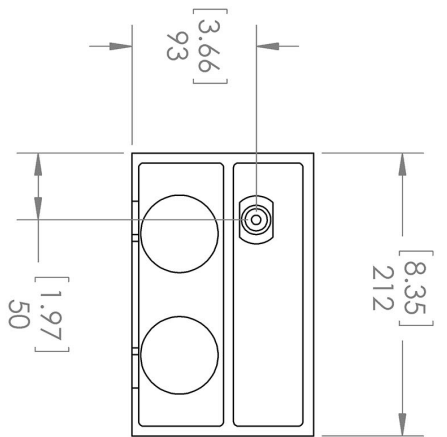
*Dimensions for fiber-integrated (I_) include laser head packaged inside.

Regulatory Classification:

The model you have selected (M31-3) requires the following safety label(s):



Dimensional Drawing - Laser Form Factor: 3:



| | | |
|---|---------------------|---|
| <p>UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MM(INCH) TOLERANCES: +/- 0.75 MM</p> | | <p>TITLE: Laserglow Technologies</p> |
| <p>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</p> | | <p>REV 1</p> |
| <p>SCALE: 1:5</p> | <p>SHEET 1 OF 1</p> | <p>Lab/OEM 3 Housing</p> |

Dimensional Drawing - Power Supply Form Factor: FM:



UNLESS OTHERWISE SPECIFIED:
 DIMENSIONS ARE IN MM(INCH)
 TOLERANCES: +/- 0.75 MM

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Laserglow Technologies

TITLE:

Power Supply
FM/FR






REV
1

SCALE: 1:3

SHEET 1 OF 1

Accessories:

The most popular accessories for model M31-3 are shown below. For additional details regarding these or other accessories please see our website or contact us directly.

| Part Number | Description | |
|---|--|---------------------|
|  ACSVISHXA | SMA-905 Fiber Coupler/Collimator for visible spectrum wavelengths (400 to 700 nm) (installed and aligned) 11mm diameter input lens Full Details: www.arktislaser.com/ACS | |
|  ACFVISHXA | FC/PC Fiber Coupler/Collimator for visible spectrum wavelengths (400 to 700 nm) (installed and aligned) 11mm diameter input lens Full Details: www.arktislaser.com/ACF | |
|  ACALB237X | Carrying Case-107 Holds Lab/OEM 2/3 wavelength Labspec laser Full Details: www.arktislaser.com/ACA | Included With Laser |
|  AFS2002XX | Armored Fiber With SMA 905 Connectors 200um Core Multimode 2 m length Full Details: www.arktislaser.com/AFS | |
|  AFF2002XX | Armored Fiber With FC/PC Connectors 200um Core Multimode 2m length Full Details: www.arktislaser.com/AFF | |

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.