Arktis Laser Product Datasheet

LRD-0660 Collimated Diode Laser System



Series Specifications:

Nominal Wavelength	660 nm
Output Type	CW
Laser Source Type	Diode

Overview:

The LRD-0660 Series of Collimated Diode (Semiconductor) Lasers are ideal for applications requiring a wavelength of 660 nm and a wide range of output power levels of 5 mW to 180 mW 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, communications research, spectral analysis, as well as laser display (entertainment) 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 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 Diode Laser 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 D66-RL, per your request, and data for the entire series is also displayed for your reference. The specs which are specific to D66-RL have been highlighted below in **red + bold**.

Output Power (mW)	**<5**, **>100**, **>180**	>10, >30
Output Power Stability (%RMS/4h)	**<1**, **<3**	<1, <3
Central Wavelength (nm)	**660**	660
Wavelength Tolerance (+/- nm)	**5**	5
Divergence (mrad, full angle)	**<1**	<1
Beam Dimensions (mm, 1/e²)	**3**	3
Warm-up Time (minutes)	**5**	15
Spectral Linewidth (nm)		<0.06
M²	**<1.5**	<1.5
Polarization Ratio	**>50**	>50
Beam Pointing Stability (mrad)	**<0.05**	
Operating Temperature Range (°C)	**10 to 35**	20 to 30
Max. Analog Modulation Freq. (Hz)	**30000**	30000
Max. TTL Modulation Freq. (Hz)	**30000**	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)	**0.6**	0.8
Beam Height from Base Plate (mm)	**24.8**	30
Dimensions of Product or Laser Head (mm)	**140.7 (l) x 73 (w) x 46.2 (h)**	122.5 (l) x 65 (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.

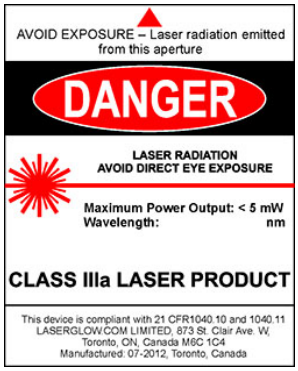
	Power Supply Type:	**FL**	**FE**
FDA-Compliant LabSpec 	Input Power	**85v to 264v**	85v to 264v
	Power Supply Weight (kg)	**15**	6.2
	Dimensions (mm)	**480 (l) x 465 (w) x 135 (h)**	320 (l) x 300 (w) x 123 (h)

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

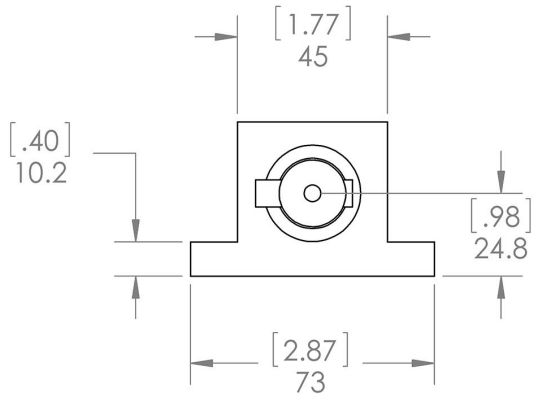
*Dimensions for fiber-integrated (I_) include laser head packaged inside.

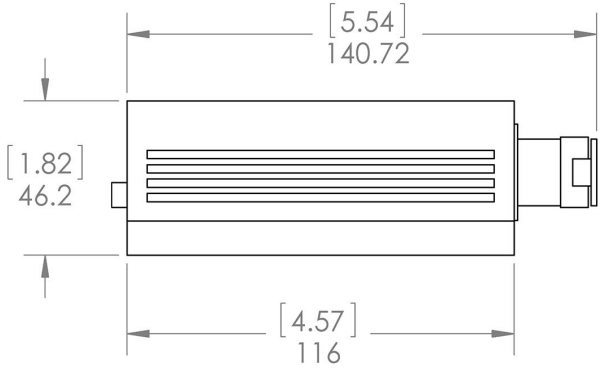
Regulatory Classification:

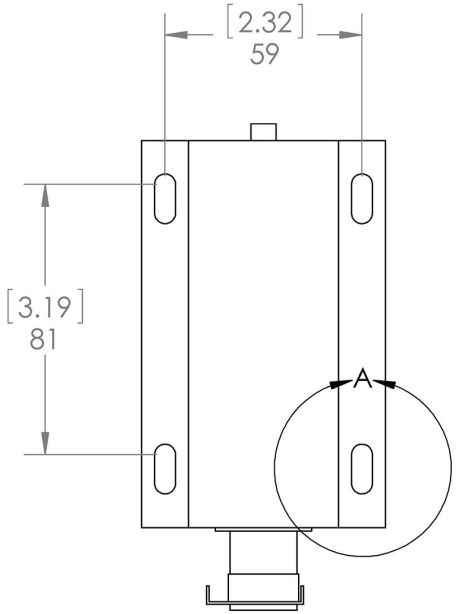
The model you have selected (D66-RL) requires the following safety label(s):

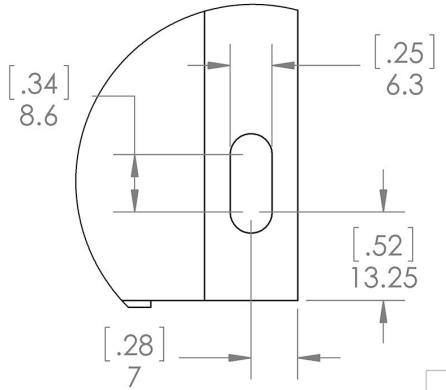


Dimensional Drawing - Laser Form Factor: RL:

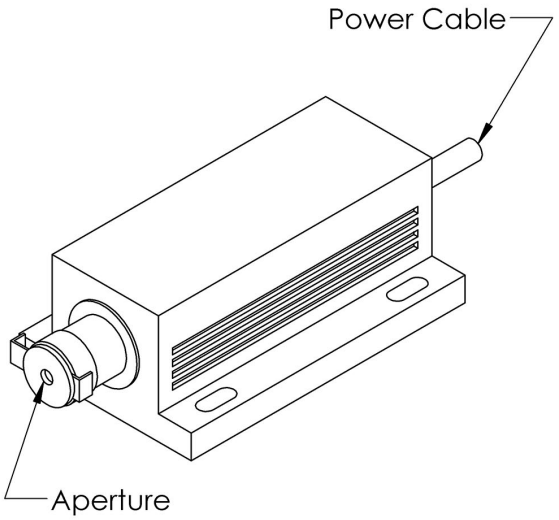








DETAIL A
SCALE 1 : 1



Laserglow Technologies

UNLESS OTHERWISE SPECIFIED:

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

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TITLE:

Lab/OEM M/R Housing

REV 1

SCALE: 1:2

SHEET 1 OF 1

Accessories:

The most popular accessories for model D66-RL are shown below. For additional details regarding these or other accessories please see our website or contact us directly.

Part Number	Description	

FOR MORE INFORMATION PLEASE CONTACT:

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Please confirm critical specifications with our staff prior to ordering.