

Laserglow Product Datasheet

LLD-0665 Low-Noise Collimated Diode Laser System



Series Specifications:

Nominal Wavelength	665 nm
Output Type	CW
Laser Source Type	Diode

Overview:

The LLD-0665 Series of Low-Noise Collimated Diode Lasers are ideal for applications requiring less than 1% noise and output power levels from 5 mW to 2000 mW. These 665 nm lasers maintain a high level of long-term output power stability and long operating lifetime at an aggressively competitive cost.

These lasers are commonly used for fluorescence excitation, 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.

Laserglow products are currently being used by some of the World's top universities and other prominent research facilities.

Key Features:

- 1% optical noise (20 Hz-20 MHz)
- 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
- 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 J6E-R, per your request, and data for the entire series is also displayed for your reference. The specs which are specific to J6E-R have been highlighted below in **red + bold**.

Output Power (mW)	<5, >10, >50, >100, >300, >500	>1000, >1500, >2000
Output Power Stability (%RMS/4h)	<1, <3, <5	<1, <3, <5
Central Wavelength (nm)	665	665
Wavelength Tolerance (+/- nm)	5	5
Divergence (mrad, full angle)	<3	<3
Beam Dimensions (mm, 1/e²)	5x8	5x8
Warm-up Time (minutes)	5	5
Optical Noise Amplitude (%RMS @ 20 Hz - 20 MHz)	<1	<1
Operating Temperature Range (°C)	10 to 35	10 to 35
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	0.9
Beam Height from Base Plate (mm)	24.8	29
Dimensions of Product or Laser Head (mm)	140.7 (l) x 73 (w) x 46.2 (h)	155 (l) x 77 (w) x 60 (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:	FR	FT
FDA-Compliant LabSpec	iant LabSpec Input Power 85v to 264v 85v to 26	85v to 264v	
2 1000 2-1	Power Supply Weight (kg)	1.5	2.6
and the same	Dimensions (mm)	154 (I) x 155 (w) x 95 (h)	268 (I) x 145 (w) x 106 (h)

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

Regulatory Classification:

The model you have selected (J6E-R) requires the following safety label(s):



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

Dimensional Drawing - Laser Form Factor: R:



Dimensional Drawing - Power Supply Form Factor: FR:



Accessories:

The most popular accessories for model J6E-R are shown below. For additional details regarding these or other accessories please see our website or contact us directly.

Part Number	D		
Part Number	Description		

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.