

Laserglow Product Datasheet

LRD-0488 Collimated Diode Laser System

Laserglow Part Number: D48150XFX

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/D48

Ordering:

Order Online Now or Request Quote: http://www.laserglow.com/D48150XFX

Series Specifications:

Nominal Wavelength	488 nm
Output Type	CW
Laser Source Type	Diode



Overview:

The LRD-0488 Series of Collimated Diode (Semiconductor) Lasers are ideal for applications requiring a short wavelength of 488 nm and output power levels of 5 mW to 150 mW with a high level of long-term output power stability and long operating lifetime at a very competitive cost.

These lasers are commonly used for various scientific applications involving fluorescence excitation, as well as PIV, 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 Diode Laser 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

- 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 D48150XFX, per your request, and data for the entire series is also displayed for your reference. The specs which are specific to D48150XFX have been highlighted below in red + bold.

Output Power (mW)	>10, >20, >30, >50, >70	>30, >50, >60, >80, >100, >120, >160	>30	>150, >200, >300, >500, >800, >1000, >1500, >1800
Output Power Stability (%RMS/4h)	<1, <3	<1, <3	<3	<1, <3, <10
Central Wavelength (nm)	488	488		488
Wavelength Tolerance (+/- nm)	5	5		5
Divergence (mrad, full angle)	<1	<1	<1	<1, <2.5x1
Beam Dimensions (mm, 1/e²)	3	3	3	3x3
Warm-up Time (minutes)	15	5		5
Spectral Linewidth (nm)	<0.06			<1.9
M ²	<1.5	<1.5, <2	<1.5	<1.3
Polarization Ratio	>50	>50		>50
Beam Pointing Stability (mrad)	<6	<6		<6
Operating Temperature Range (°C)	20 to 30	10 to 45		10 to 45
Max. Analog Modulation Freq. (Hz)	30000	30000	30000	30000
Max. TTL Modulation Freq. (Hz)	30000	30000	30000	10000, 30000
Modulation Input Signal	0-5 VDC	0-5 VDC	0-5 VDC	0-5 VDC
Max. Power Input Duty Cycle	100%	100%	100%	100%
Standard Warranty (months)	12	12	12	12
MTTF (operational hours)	10000	10000	10000	10000
Weight of Product or Laser Head (kg)	0.8	0.6	0.2	0.6
Beam Height from Base Plate (mm)	30	24.8	15	24.8
Dimensions of Product or Laser Head (mm)	122.5 (l) x 65 (w) x 50 (h)	140.7 (l) x 73 (w) x 46.2 (h)	77 (l) x 30 (w) x 30 (h)	140.7 (l) x 73 (w) x 46.2 (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:	FE	FR
FDA-Compliant LabSpec	Input Power	85v to 264v	85v to 264v
2 100 2	Power Supply Weight (kg)	6.2	1.5
and the second second	Dimensions (mm)	320 (l) x 300 (w) x 123 (h)	154 (l) x 155 (w) x 95 (h)

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

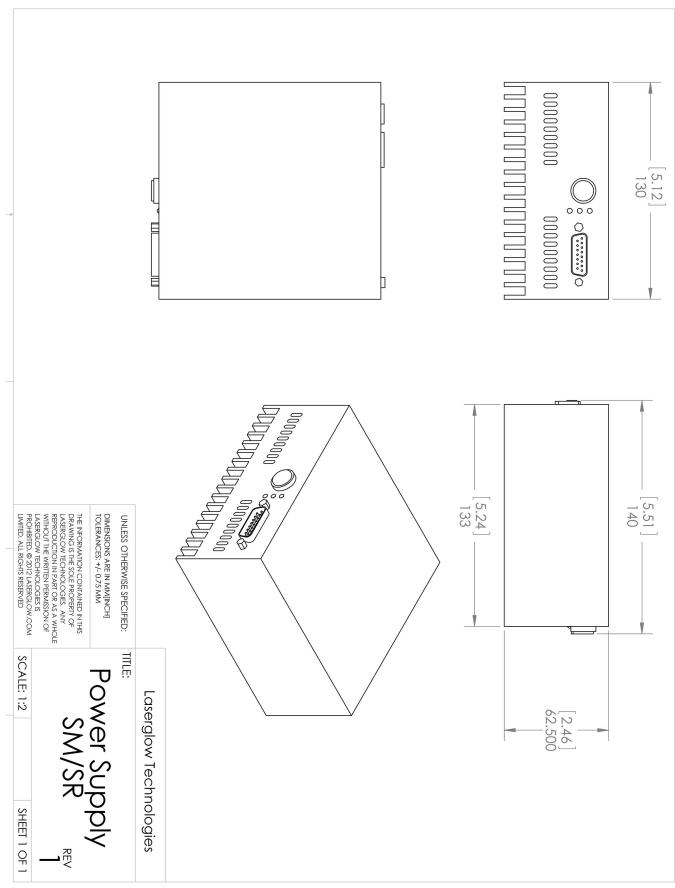
The model you have selected (D48150XFX) requires the following safety label(s):







Dimensional Drawing - Power Supply Form Factor: SR:



Accessories:

The most popular accessories for model D48150XFX are shown below. For additional details regarding these or other accessories please see our website or contact us directly.

Part Number	Description	
ACALBMXXX	Carrying Case-102 Holds Lab/OEM M, R and S size, standard or LabSpec laser Full Details: <u>www.laserglow.com/ACA</u>	Included With Laser
ACFVISHXA	FC/PC Fiber Coupler/Collimator for visible spectrum wavelengths (400 to 700 nm) (installed and aligned) 11mm diameter input lens Full Details: www.laserglow.com/ACF	
ACSVISHXA	SMA-905 Fiber Coupler/Collimator for visible spectrum wavelengths (400 to 700 nm) (installed and aligned) 11mm diameter input lens Full Details: www.laserglow.com/ACS	
AGF5322XX	LSG-532-NF-2 Fit-Over Safety Goggles 532nm Output: OD 2+ at 400-532 nm CE Certified Full Details: www.laserglow.com/AGF	
AFS2002XX	Armored Fiber With SMA 905 Connectors 200um Core Multimode 2 m length Full Details: <u>www.laserglow.com/AFS</u>	
AFF2002XX	Armored Fiber With FC/PC Connectors 200um Core Multimode 2m length Full Details: <u>www.laserglow.com/AFF</u>	

FOR MORE INFORMATION PLEASE CONTACT:

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 $\ensuremath{\mathsf{E}\&\mathsf{OE}}$: Data included in this sheet may be subject to change without notice.

Please confirm critical specifications with our staff prior to ordering.