

**MECHANICAL SPECIFICATIONS**

Laser Material: InGaAlP

Housing Material: Aluminum\*  
Type III Class 2 Black Anodized

Exit Aperture Protection: Sapphire Window

Lens Material: Glass

**OPTICAL SPECIFICATIONS**

Wavelength (25°C): Various within the range of 630nm - 830nm\*

Wavelength Stability: 0.25nm / °C (Nominal)

Output Power (Exit Aperture): Varies with specific laser choice and fan angle\*

Output Power Stability (25°C): <1% Fluctuation over 60 Minutes

Output Power vs. Temperature: <0.5% / °C (Nominal)

Fan Angle: 10°, 45°, 60°, 90° (Nominal)\*

Line Thickness : ~1mm at 1 Meter (varies with lens and focus)\*

Line Intensity Profile: Gaussian

Emissions Indicator: Red LED

**POINTING SPECIFICATIONS**

Accuracy: <2mrad

Stability vs. Temperature: <10µrad / °C

**ELECTRICAL SPECIFICATIONS**

Operating Voltage: 5VDC Regulated +/- 1% \* (24VDC option available)

Load Current –Typical at 25°C: Varies with Output Power and Wavelength

Load Current –Max. at 25°C: Varies with Output Power and Wavelength

Continuous Wave: Turn on Time <0.1s

Case: Electrically Isolated

Electronic Protection: Reverse Polarity Protection  
Over Voltage Protection  
Surge Protection

Interconnect: IP68 M12 X 1 Male Receptacle (Standard)  
(See Drawing) 2.5mm Male DC Power Jack (Option)

**ENVIRONMENTAL SPECIFICATIONS**

Operating Temperature: -10 to 50°C (60°C, 70°, 80°C) \*

Storage Temperature: -40°C to 85°C

Static Discharge Immunity: >12Kv (Contact)

Dust/Water Resistance: Yes

**RELIABILITY/REGULATORY SPECIFICATIONS**

Certifications: RoHS compliance  
CE  
CDRH Class Dependant Upon Output Power and Wavelength

Warranty: 2 Years

\*Indicates Customization Available

REVISION HISTORY			
REV	DESCRIPTION	DATE	APPROVED
1	Originate Document	10/16/06	Zack S.

65.2 ± 1.5 mm [2.57 ± 0.06 in]

55.1 ± 1.5 mm [2.2 ± 0.1 in]

52.1 ± 0.5 mm [2.05 ± 0.02 in]

31.75 ± 0.15 mm [1.250 ± 0.006 in]

2.92 ± 0.25 mm [0.115 ± 0.010 in]

19.05 <sup>+0.00</sup>/<sub>-0.05</sub> mm [0.750 <sup>+0.000</sup>/<sub>-0.002</sub> in]

12.4 ± 0.1 mm [0.490 ± 0.004 in]

18.5 ± 0.1 mm [0.730 ± 0.004 in]

Mounting Surface and Heat Sink

IP68 M12X1 Male Receptacle

Black (-) Blue (+)

Modulation / NC

56.5 ± 1.5 mm [2.22 ± 0.06 in]

52.0 ± 0.5 mm [2.05 ± 0.02 in]

31.75 ± 0.15 mm [1.250 ± 0.006 in]

2.92 ± 0.25 mm [0.115 ± 0.010 in]

19.05 <sup>+0.00</sup>/<sub>-0.05</sub> mm [0.750 <sup>+0.000</sup>/<sub>-0.002</sub> in]

12.4 ± 0.1 mm [0.490 ± 0.004 in]

18.5 ± 0.1 mm [0.730 ± 0.004 in]

Mounting Surface and Heat Sink

2.5mm Male DC Jack

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APPROVALS	DATE		<b>DIODE LASER CONCEPTS, INC.</b> 4731 Industry Drive Central Point, Oregon 97502 USA
Drawn By: Zack S.	10/16/06		
Approved By: Mike R.	10/16/06		
Customer Approval: N/A	N/A		
		Part Number:	Specific part numbers are issued according to configuration.
		Description:	General specifications for Industrial line generator modules.

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