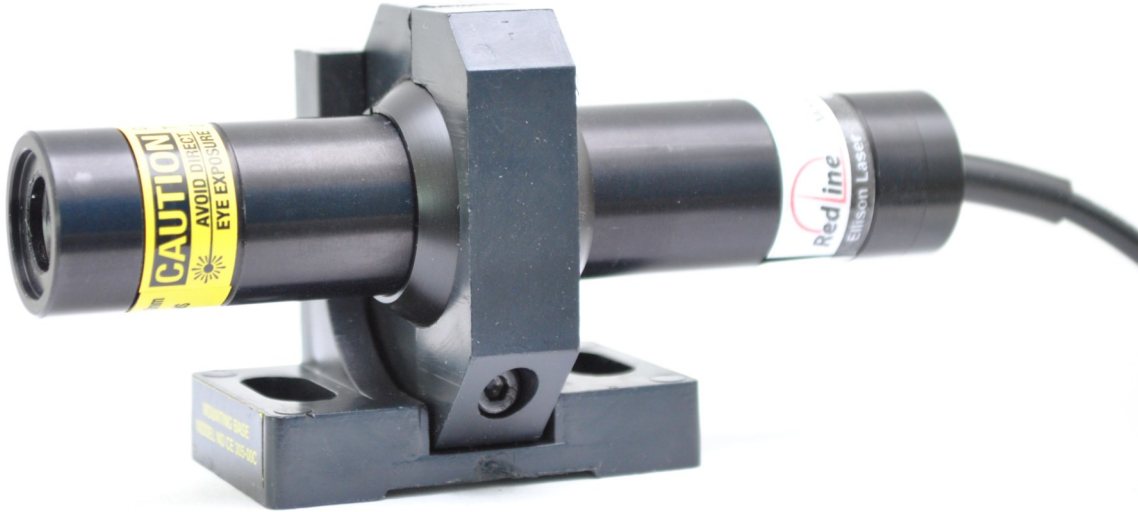


# MARK VII Series

High Performance Diode Laser Systems



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## Features:

- Custom engineered optics produce a clean, consistent line from end to end
- Wide selection of optics available, able to produce many different line lengths for different applications
- Custom focusing available - produce an even line intensity from any mounting angle
- Wide range of power output available, to suit many different applications



## The Ellison Group

#152-1124 Fir Avenue, Blaine, WA, USA 98230

Phone: (503) 644-7007 Fax: (503) 644-7834

TOLL FREE: 877-977-0022 Web: [www.ellisonlaser.com](http://www.ellisonlaser.com)

# Technical Specifications



## External Housing Specifications

Housing Dimensions	Ø19.05mm x105.0mm (0.75"x4.12")
Housing Material	Aluminum, Hard Red Anodized T6061, Electrically Isolated
Exit Aperture Protection	AR Coated, BK7 Glass Window
Customizations	Dimensions, Materials, Exit Aperture Protection

## Electrical Specifications

Operating Voltage	90-240Vac Options: 9-24Vdc or 12-24Vac or 5Vdc
Load Current	30-200mA
Load Current vs. Temperature	0.7mA/°C Nominal
Continuous Wave Standard Driver	Option: Constant current
TTL Modulation Optional Driver	CW to 10kHz, Full Depth Modulation, +5VDC = ON
Electronic Protection	Reverse Polarity, Over Voltage, Surge Protection
Interconnect, Cable, Red +, Black -, (White TTL)	180mm Nominal, 20AWG, UL1569, or customized

## Environmental Specifications

Operating Temperature	5°C to 40°C
Storage Temperature	-40°C to 80°C
Dust/Water Resistant	Yes IP65

## Optical Specifications

Wavelength	635-690nm
Wavelength Stability	0.3nm/°C Nominal
Optical Output Power	1-100mW (at the exit aperture)
Power Output Stability at 25°C	+/- 1%
Line Generator	Customized, fan angle 7,5° - 90°
Spot Size	Customized option
Beam Divergence	<5mrad
Focal Distance	User defined
Line Thickness	1mm@3m Distance 3/16" @ 10' (@ 1/e <sup>2</sup> )
Line Thickness Divergence	<1mRad
Line Intensity Profile	Gaussian or Uniform
Lens Material	Glass or Plastics (HEA Coated)

## Pointing Specifications

Accuracy	<3mrad
Stability vs. Temperature	<10urad/°C

## Reliability/Regulatory Specifications

Laser Lifetime expected	>10.000 hrs @ 25°C
Certification/Regulatory	FDA/CDRH, CE
Warranty	2 Year



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