

# FLUID COOLED LASER DIODE ARRAYS



*Lasertel's fluid cooled laser diode arrays utilize a patented monolithic design that requires only filtered water (not deionized). This eliminates the most common failure mechanisms associated with microchannel cooled laser diodes. Requiring no o-rings or rubber gaskets, our laser diode arrays perform reliably in harsh environments.*

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## KEY FEATURES:

- 760nm to 1700nm
- Filtered water, not deionized
- Non-water alternative cooling fluids
- Scalable building block format
- Small bar-to-bar pitch for increased brightness
- Hard soldered construction
- Advanced beam conditioning
- Low pressure and water flow requirements
- Multi-wavelength in a single array

*\* Contact us for custom configurations*

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Lasertel products proudly made in the USA  
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# YOUR LASER STARTS HERE

## Customizable Packages

Lasertel laser diodes are manufactured in our US-based ISO 9001:2015, ISO 13485:2016 and AS9100C certified facility.



## TYPICAL SPECIFICATIONS:

760nm - 1100nm					
TYPICAL OPTICAL PARAMETERS (@25 °C)	Units	Typical Value			
Array Peak Output Power	W	1600	2000	2400	25000
Bar Emission Length	mm	10			
Operation Mode		CW			Pulsed
Operating Current	A	90	105	125	550
Number of Bars	#	up to 20			up to 50
Operating Voltage per Bar (760nm - 830nm)	V	1.9			2
Operating Voltage per Bar (850nm - 1100nm)	V	1.7			1.8
Power Conversion Efficiency	%	58			56
Bar to Bar Pitch	mm	1.1			0.35
Beam Divergence					
Fast Axis (FWHM)	°	36			32
Slow Axis (FWHM)	°	10			

1400nm - 1700nm		
TYPICAL OPTICAL PARAMETERS (@25 °C)	Units	Typical Value
Array Peak Output Power	W	500
Bar Emission Length	mm	10
Operation Mode		CW
Operating Current	A	80
Number of Bars	#	up to 20
Operating Voltage per Bar	V	1.5
Power Conversion Efficiency	%	25
Bar to Bar Pitch	mm	1.1
Beam Divergence		
Fast Axis (FWHM)	°	27
Slow Axis (FWHM)	°	10

Patent Numbers: US 7,660,335 | US 7,864,825 | US 6,352,873 | US 6,295,307

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