

# LDI

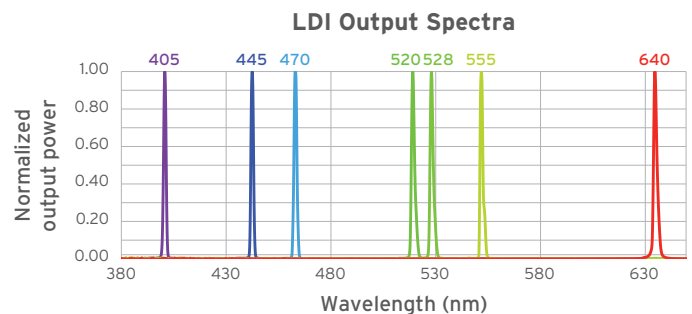
## HIGH-PERFORMANCE LASER DIODE ILLUMINATOR

The LDI is the a multiline, solid-state laser illuminator offering up to 1000mW of output power via a multimode fiber at the price of low power LED light engine. With feedback controlled output stability and up to a 100:1 linear dynamic range, the LDI is the ideal light source for a wide range of applications including spinning disk confocal microscopy, structured illumination microscopy, FRAP, photoactivation/photoconversion, and TIRF microscopy, including PALM/STORM.

The LDI offers the highest price to performance ratio of any laser source available on the market today.

### LASER LINES AVAILABLE

Laser Line (nm)	Power (mW)
	<i>Out of fiber (400 μm 0.22 NA)</i>
405	300
445	1000
470	1000
520	500
528	500
555	1000
640	500



### FEATURES AND BENEFITS

High output power	Shorter exposures Faster Imaging Faster activation times in optogenetics and photoactivation experiments Faster bleaching times in FRAP experiments
Feedback controlled optical stability	Quantitative imaging, ideally suited for ratiometric imaging More repeatable optogenetics experiments
Up to 100:1 linear dynamic range	Ability to turn power down when needed and maintain stability and quantitative imaging
Up to 7 lines	Covers most of the standard fluorescence probes
No user alignment	Easy to use and maintain

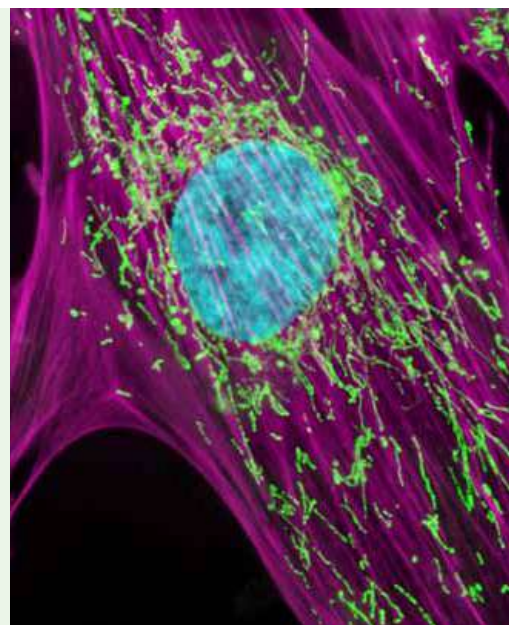
## PRELIMINARY SPECIFICATIONS

<b>Source Type</b>	Laser Diodes						
<b>Lifetime</b>	20,000 hrs - 2 year warranty						
<b>Wavelength (nm)</b>	405	445	470	520	528	555	640
<b>Width (nm)</b>	0.6	2-3	2-3	4-6	4-6	0.6	0.8-1.5
<b>CWL Range</b>	398-406	440-446	465-470	520-522	527-528	553-555	632-643
<b>Stability (rms)*</b>	<1%	<1%	<1%	<1%	<1%	<1%	<1%
<b>Optical Power Min (mW)</b>	300	1000	1000	500	500	1000	500
<b>Rise*</b>	10 $\mu$ s	10 $\mu$ s	10 $\mu$ s	10 $\mu$ s	10 $\mu$ s	1 ms	10 $\mu$ s
<b>Output Options</b>	400 $\mu$ m - 1.5 mm optical fiber**						
<b>Control Options</b>	TTL (>2.3 V) Analog (0-5 V) USB-DSP (virtual COM port) - SDK available upon request						
<b>Safety</b>	Interlocked housing Safety interlock Key interlock						
<b>Dimensions</b>	12.5" x 9.2" x 5.75"						
<b>Weight</b>	~9 lbs						
<b>Operating Temperature</b>	5-30 °C						
<b>Storage Temperature</b>	-18-50 °C						
<b>Humidity</b>	<85% (NC)						
<b>Voltage</b>	90-220 V AC, 50-60 Hz						
<b>Fuse</b>	None						

\*When in feedback mode

\*\*Smaller fiber available with loss of power

This product is subject to FCC rules. Delivery is contingent upon demonstrated compliance with the applicable equipment authorization and technical requirements.

**Applications***Spinning Disk Confocal Microscopy with Crest X-Light V2**Super Resolution SIM Imaging with Crest VCS**TIRF (with 50-micron fiber) with new OptoTIRF from Cairn Research**PALM/STORM with new OptoTIRF from Cairn Research**Optogenetics with DLPs or Multiport Illuminator**Photoactivation/Photoconversion  
with SLM or Multiport Illuminator**FRAP with SLM or Multiport Illuminator*

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