

HIGH POWER kHz DPSS LASERS

JX500 series

The JX500 is a series of modern kHz lasers with high average power and TEM₀₀ beam quality in the IR, VIS and UV spectral ranges.



Lasers of this series were specially developed to solve such problems as diamond cutting and microprocessing of other superhard materials. The excellent beam quality and the ability to operate 24/7 in plug-and-play mode, make these lasers an ideal tool not only for industrial, but also for scientific applications.

The dustproof housing design combined with the original optical scheme and diode pumping allows you to minimize the laser service costs and concentrate exclusively on the tasks you are facing.

FEATURES

- Average power > 20 W at 1064/532 nm
- TEM₀₀, M² ≤ 1.4
- Industrial design for 24/7 operation
- Long diode lifetime over 1 billion shots

APPLICATIONS

- Diamond cutting
- Micromachining of semiconductors
- Micromachining and marking of metal, glass and plastics
- Nonlinear spectroscopy
- Nonlinear optics
- Remote sensing

SPECIFICATIONS *

Model	JX510	JX520	JX530
Wavelength, nm	1064	532	355
Average power ¹⁾ , W	25	20	6
Pulse repetition rate, kHz	3 - 20	4 - 15	4 - 10
Pulsewidth ¹⁾ , ns	< 90	< 80	< 90
Beam diameter, mm	1.0	0.9	0.7
Power stability (Std.Dev) ²⁾ , %	≤ 3,3	≤ 3.0	≤ 4.0
Divergence, mrad	≤ 2.2	≤ 1.6	≤ 1.1
M ² ¹⁾	< 1.4	< 1.3	< 1.2
Beam quality	TEM ₀₀		
Cooling	Air - Water		
Electrical service	100...240V, 50/60 Hz		
Dimensions, mm:			
Laser Head (LxWxH)	580 x 165 x 140		
Power Supply (HxWxD)	480 x 160 x 280		
Chiller	315 x 555 x 750		

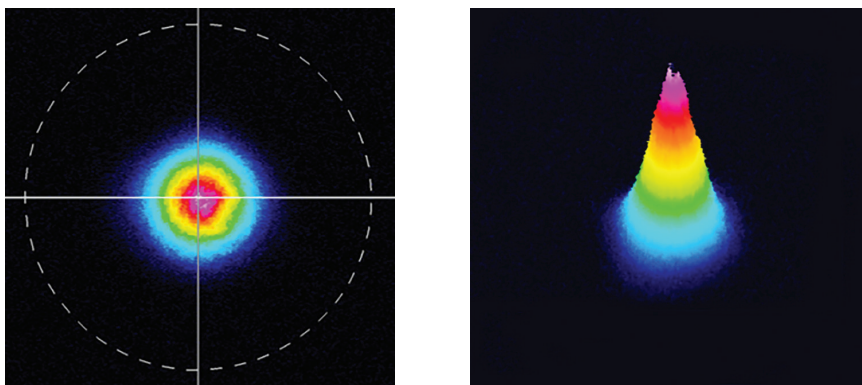
* Specifications are subject to change without notice.

¹⁾ Specified at 8 kHz.

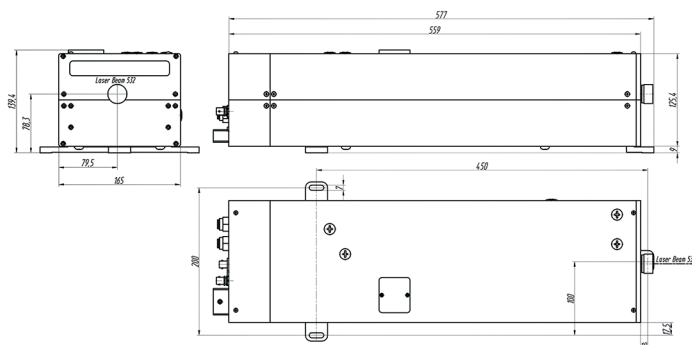
²⁾ Within 24 hours of continuous operation.

OPTIONS

- Beam expanders
- External attenuators
- Halvanoscanners



JX520 laser beam profile.



JX520 Laser Head outline drawing.