

JEWEL LASER



The Jewel DPSS Lasers

The Jewel Laser Diode Pumped Q-switch Nd: YAG laser

The Jewel is a rugged, monolithic design, air cooled, diode pumped laser, supplying 15mJ energy, with rep rates up to 20Hz. Reliable, light-weight, compact with easy to swap components make the Jewel ideal for commercial and OEM applications.

FEATURES:

- Compact, monolithic resonator
- Efficient, reliable diode pump
- Excellent shot to shot stability
- Integrated electronics and thermal management
- High efficiency pumphead, 20Hz less than 5W
- USB standard with optional Bluetooth



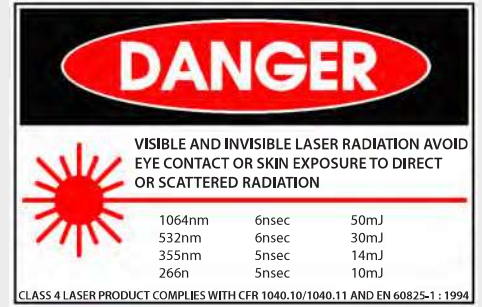
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ADDITIONAL INFORMATION

Laser Resonator (w/o electronics):	
Size	35mm x 95mm x 25mm
Temperature Range	15/30°C, Conductively cooled
Optical Laser (w/ integrated electronics & thermal management)	
Size	82mm x 180mm x 60mm
Operational Temperature Range	15/30°C, Internal thermal management
Storage Temperature Range	10/50°C
Power Requirements	36VDC, 25 to 50
Diode Lifetime	300,000,000 pulses



TECHNICAL SPECIFICATIONS

	Std	HiRate	HiPower
Rep Rate (Hz)	1 to 10	1 to 20 40Hz Burst	1 to 4
Energy per Pulse (mJ)			
1064nm	15	10	20
532nm	6	4	10
355nm	3	2	5
266nm	2	1.5	4
Energy Stability (% RMS)			
1064nm	<2.0	<2.5	<1.5
532nm	<2.5	<3.0	<2.2
355nm	<3.0	<3.5	<2.5
266nm	<3.0	<3.5	<2.5
Energy Variance (% (max-min)/(max+min))			
1064nm	<5.0	<6.0	<4.0
532nm	<7.0	<8.0	<6.0
355nm	<8.0	<10.0	<7.5
266nm	<8.0	<10.0	<7.5
Pulse Duration (ns)			
1064nm	12	12	8
532nm	11	11	7
355nm	10	10	6
266nm	10	10	6
Timing Jitter (±ns)	<2		
Beam Divergence (mrad)			
1064nm	<2.5	<2.5	<2.5
532nm	<2.0	<2.0	<2.0
355nm	<1.8	<1.8	<1.8
266nm	<1.8	<1.8	<1.8
Beam Diameter (mm)	3.2	3.2	3.2



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