



GERMANY

EXCELLENCE IN LASER AND MEDIATECHNOLOGY



LightCube Lasersystems
375nm up to 670nm, 10mW up to 30W
Single Diode up to high integrated Systems

*Diode, DPSS and OPSL Lasersystems
unique - reliable - maintenance free*

Diode, OPSL und DPSS Lasersysteme
einzigartig - zuverlässig - wartungsfrei



VULCAN Industrial Laser
Adjustment and Positioning Systems

*from an easy laser-line up to
complex CAD-drawing-projection*

von der einfachen Hilfslinie bis zur komplexen
CAD-Zeichnungsprojektion



OEM - Electronic - Products
Diode Drivers, TEC Coolers, Scann Amplifiers

*Serial products and customized solutions for easy
implementation*

Serienprodukte und kundenspezifische Lösungen zur
einfachen Integration



Components
Mirrors, Filters, Lenses, Achromates, Aspheres

*Precise optical and mechanical
solutions for easy implementation*

Optische und Mechanische Präzisions - Lösungen zur
einfachen Integration



Service
Gas Ion Laser Refill,
Laserservice, Lasersafety-training
Soft & Hardware training

Gas Ionen Laser Refill
Laserservice, Lasersicherheitsschulungen
Soft & Hardware Schulungen

Certified Quality

DIN ISO 9001 : 2008
Coherent
Jenoptik



Awarded

More than 30 national
and international awards
for products, installations
and shows.



Customized developments
are welcome

NEW WEB SHOP

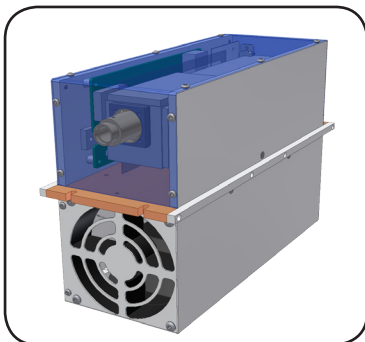
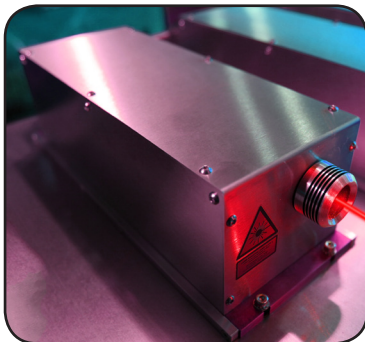
<http://shop.hb-laser.com/>

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LightCube Revolution Diode modules

Model	Red 637 nm	Red 643 nm	Red 655 nm	Blue 445 nm	Violet 405 nm
Wavelength (nm)	637 ± 5	643 ± 5	655 ± 5	445 ± 5	405 ± 5
Power (W)	0.6 W; 1.2 W; 2.5 W; 5 W	0.5 W; 1 W; 2 W; 4 W	0.4 W; 0.8 W; 1.6 W; 3.2 W	1 W; 2 W; 4 W; 15 W; 30 W	0.5 W; 1 W; 2 W; 7.5 W; 15 W
Beam Divergence (1/e ² , mrad)	(0.6; 1.2 W) <1.0 (2.5; 5 W) <1.2			(1; 2 W) <0.8 (4 W) <1.2 (15; 30 W) <4.0	(0.5; 1; 2 W) <0.8 (7.5; 15 W) <1.2
Beam Diameter	(0.6; 1.2 W) <3.2 x 3.2 (2.5; 5 W) <4.5 x 4.5			(1; 2 W) <3 x 3 (4; 15; 30 W) <4.5 x 4.5	(0.5; 1; 2 W) <3.2 x 3.2 (7.5; 15 W) <4.5 x 4.5
Pointing Stability (µrad/C°)	<30				
Noise 10 Hz to 10 MHz (% rms) 10 Hz to 5 kHz (% peak-to-peak)	<1 <10				
Polarization Ratio	50/50 horizontal and vertical				
Modulation	50 kHz analog 0-5 V				
Input Voltage	24 V / DC optional 90-240 V / AC				
Cooling	Air TEC stabilized (water cooled systems available on request)				
Dimensions L x W x H	230 x 100 x 170 mm				

Fiber coupled systems available on request
Dual-power and multi-wavelength systems available on request



LightCube Revolution DPSS modules

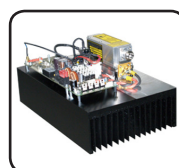
Model	Green 532 nm	Blue 473 nm	Blue 457 nm
Wavelength (nm)	532 ± 1	473 ± 1	457 ± 1
Power (W)	0.6 W; 1.2 W; 2 W; 3W; 4W; 5 W	0.5 W	0.8 W; 1.5 W; 2.5 W;
Beam Divergence (1/e ² , mrad)	(0.6; 1.2 W) <1.0 (2 - 5 W) <1.2	<1	<1
Beam Diameter	(0.6; 1.2 W) <2.0 (2 - 5 W) <3.0	<2	<3
M ² factor	(0.6; 1.2 W) <1.5 (2 - 5 W) <3.0	<1.5	<3
Polarization Ratio	>100:1 vertical		
Modulation	50kHz analog 0-5V		
Input Voltage	24V / DC optional 90-240V / AC		
Cooling	Air TEC stabilized (water cooled systems available on request)		
Dimensions L x W x H	230 x 100 x 170 mm		

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Dual-power and multi-wavelength systems available on request

Applications

Medical Systems
Bio photonics
Forensic
Laser pumping
Entertainment
Science
Lab application
Spectroscopy

High integrated system
No external driver or powersupply
Intelligent remote bus system
for external control
Easy to integrate



OEM integration
modules for
customized
solutions are
available.



Intelligent remote
bus system con-
trols up to 200
LC-systems with
one unit.