



JenLas® *smaragd* & *garnet* - plug and mark® Air-cooled q-switched Disk Lasers from 5 W to 20 W

Advantages:

- Disk laser design
- Long Life Performance
- Ultra-compact
- Air-cooled
- Flat top beam profile

Customer benefits:

- Constant beam diameter
- Proven reliability in industrial use
- Easy integration
- No cooler, no water, no filter replacement required
- Low cost of ownership
- High edge quality

Applications:

- Quality marking
- Precision engraving
- Precision material processing
- Trimming



JenLas® <i>smaragd</i> 5	5 W	YAG	fundamental mode	... 50 kHz
JenLas® <i>smaragd</i> 8 van	8 W	Vanadat	fundamental mode	... 200 kHz
JenLas® <i>smaragd</i> 8	8 W	YAG	low order	... 50 kHz
JenLas® <i>smaragd</i> 12	12 W	Vanadat	low order	... 200 kHz
JenLas® <i>garnet</i> 16	16 W	YAG	low order	... 50 kHz
JenLas® <i>garnet</i> 20	20 W	Vanadat	low order	... 200 kHz

JenLas® smaragd & garnet

Air-cooled q-switched Disk Lasers from 5 W to 20 W

Specifications

Parameters	JenLas® smaragd 5	JenLas® smaragd 8 van	JenLas® smaragd 8	JenLas® smaragd 12	JenLas® garnet 16	JenLas® garnet 20
Laser	Disk laser, air-cooled					
Wavelength	1064 nm					
cw output power	5 W	8 W	8 W	12 W	16 W	20 W
Beam diameter 1/e ² (typ.)	1 mm	1 mm	1.5 mm	1.5 mm	2 mm	2 mm
Polarization	random	linear	random	linear	random	linear

Q-switched operation						
Pulse energy	> 0.4 mJ @ 5 kHz	> 0.1 mJ @ 10 kHz	> 0.6 mJ @ 5 kHz	> 0.15 mJ @ 10 kHz	> 1.4 mJ @ 5 kHz	> 0.3 mJ @ 10 kHz
Pulse-to-pulse stability (p-p)	< 2.5 % @ 5 kHz	< 2.5 % @ 10 kHz	< 2.5 % @ 5 kHz	< 2.5 % @ 10 kHz	< 5.0 % @ 5 kHz	< 3.0 % @ 10 kHz
Pulse repetition rate (max.)	50 kHz	200 kHz	50 kHz	200 kHz	50 kHz	200 kHz
Pulse length	< 90 ns @ 5 kHz	< 70 ns @ 10 kHz	< 110 ns @ 5 kHz	< 75 ns @ 10 kHz	< 130 ns @ 5 kHz	< 80 ns @ 10 kHz
M ² typical (max.)	1.7 (2.1)	1.7 (2.1)	3.0 (3.5)	3.0 (3.5)	4.0 (5.0)	4.0 (5.0)

Electrical specifications	
Power supply	90 ... 230 V, 50/60 Hz
Input power	400 VA (typ.), 800 VA (max.)

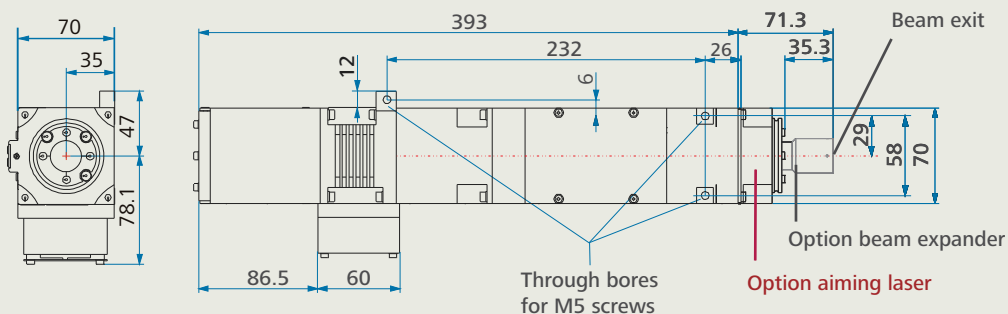
Mechanical specifications	
Laser head	
Dimensions (L x W x H)	393.0 mm x 125.1 mm x 70.0 mm
Weight	4 kg
Power supply	
Dimensions (W x H x D)	19" x 4 HU x 500 mm
Weight	20 kg

Operational conditions	
Ambient temperature range	5 °C ... 40 °C

Options	
Aiming laser	red
Beam expander	2x; 3x ... 10x
Cable length	2 m; 4.8 m

Please contact us for further technical details.

Laser head with aiming laser and beam expander



It is our policy to constantly improve the design and specifications. Accordingly, the details represented herein cannot be regarded as final and binding.



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