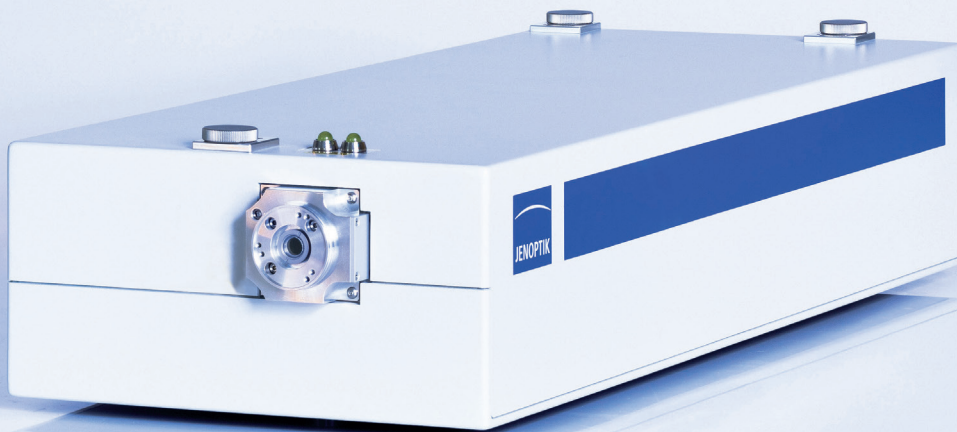




JenLas[®] *disk IR50 | IR70 | IR70E*

Nanosecond disk lasers with high peak power



Advantages

- Peak power >200 kW
- Pulse energy up to 7 mJ
- Best beam quality
- Free adjustable pulse length and repetition rate (independently)
- Fast beam modulator for pulse-on-demand & power control
- Sync input for on-the-fly applications

Customer Benefits

- High productivity
- High micro machining quality with small heat affected zone due to high peak power
- Stable 24/7 operation
- Easy system integration, low maintenance

Applications

- Precise micro processing
- Micro drilling, cutting, and structuring
- Hard & brittle materials like SiC, WC, PCD or other diamond
- Highly heat-conductive materials like Cu, Al or Ti
- Composite materials like CFRP

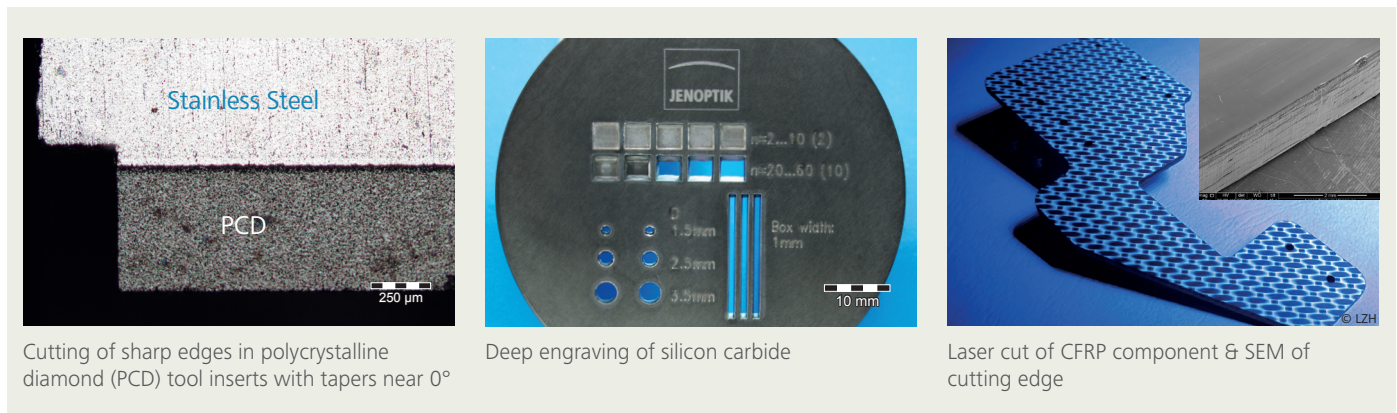
JenLas® disk IR50 | IR70 | IR70E

Nanosecond disk lasers with high peak power

Specifications

General Properties	JenLas® disk IR50	JenLas® disk IR70	JenLas® disk IR70E
Maximum output power	45 W	65 W	65 W
Maximum pulse energy	5 mJ	7 mJ	6.5 mJ
Maximum peak power	25 kW	35 kW	217 kW
Pulse length (adjustable)	200 – 2000 ns	200 – 1600 ns	30 – 300 ns
Pulse repetition rate	8 – 100 kHz	8 – 100 kHz	10 – 300 kHz
Fast beam modulator	single shot, pulse picking, pulse energy attenuation		
Wavelength	1030 nm		
Beam quality M ²	≤ 1.2		
Beam diameter	1.4 mm		
Polarization	linear		
Operating Conditions			
Ambient temperature	15 – 35 °C (water/air chiller) 15 – 40 °C (water/water chiller)		
Ambient relative humidity	10 – 95 % (non condensing)		
Cooling	chiller included (water/air and water/water available)		
Electrical Properties			
Laser: Operating voltage	100 – 240 VAC (50/60 Hz)	200 – 240 VAC (50/60 Hz)	
max. Power consumption	< 1,6 kVA	< 2,1 kVA	
Chiller: Operating voltage	230 VAC (50/60 Hz)	230 VAC (50/60 Hz)	
max. Power consumption	< 2,0 kVA	< 2,0 kVA	
Mechanical Properties			
Dimensions (W x H x L) weight	Laser head: 340 mm x 184 mm x 865 mm 45 kg Power supply: 19" x 4 RU x 500 mm 15 kg Chiller: 19" x 7 RU x 650 mm 65 kg		

Application Examples



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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