



JenLas[®] fiber ns 10–70

Air- or Water-Cooled Nanosecond Fiber Lasers



Advantages:

- First + last pulse equal
- Isolated optical output
- Pulse width variable
- Highly reliable components
- Up to 20 kW peak power (nominal)
- OEM-design
- High pulse repetition rate (up to 1 MHz)

Customer benefits:

- Constant application results
- Metal applications possible
- Optimized application
- Low cost of ownership
- Easy integration
- High speed application

Applications:

- Marking
- Scribing
- Ablation
- Silicon processing
- Trimming
- Cutting

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Specifications

JenLas® fiber ns	10 – Basic single mode	20 – Basic multi mode	12 – Advanced multi mode	20 – Advanced multi mode single mode		30 – Advanced multi mode	40 – Advanced multi mode	50 – Advanced single mode	70 – Advanced multi mode
Output power	10W	20W	12W	20W		30W	38W	50W	70W
Pulse rep. range	1–200kHz	1–200kHz	1kHz–1MHz	1kHz–1MHz	1kHz–1MHz	1kHz–1MHz	1kHz–1MHz	1kHz–1MHz	1kHz–1MHz
Pulse width (FWHM)	30–200ns ¹⁾	30–200ns ¹⁾	10–200ns ²⁾	10–200ns ²⁾	10–220ns ²⁾	10–200ns ²⁾	10–250ns ²⁾	10–220ns ²⁾	10–250ns ²⁾
Pulse energy (max.)	≥ 0.5 mJ	≥ 0.8 mJ	≥ 0.6 mJ	≥ 0.8 mJ	≥ 0.55 mJ	≥ 1.0 mJ	≥ 1.25 mJ	≥ 0.7 mJ	≥ 1,25 mJ
Peak power (max.)	≥ 6kW	≥ 12kW	≥ 9kW	≥ 12kW	≥ 7kW	≥ 15kW	≥ 20kW	≥ 9kW	≥ 20kW
Modulation range in cw	N/A	N/A	CW up to 100kHz	CW up to 100kHz		CW up to 100kHz	CW up to 100kHz	CW up to 100kHz	CW up to 100kHz

¹⁾ rep.rate dependent

²⁾ adjustable

Centre wave length	1062 nm (± 3 nm)								
Output power stability (typ.)	3%	5%	5%	5%	3%	2%	2%	3%	2%
Beam quality (M ²)	≤ 1.3	≤ 2	≤ 2	≤ 2	≤ 1.3	≤ 3.5	≤ 3.5	≤ 1.3	≤ 3.5
Polarisation	random								
Fiber output	LLK-B incl. optical isolator								
Beam delivery cable length	2m	2m	2m	2m (3m*)	2m	3m (5m*)	3m (5m*)	2m	3m (5m*)
Internal pilot laser	optional								

* optional

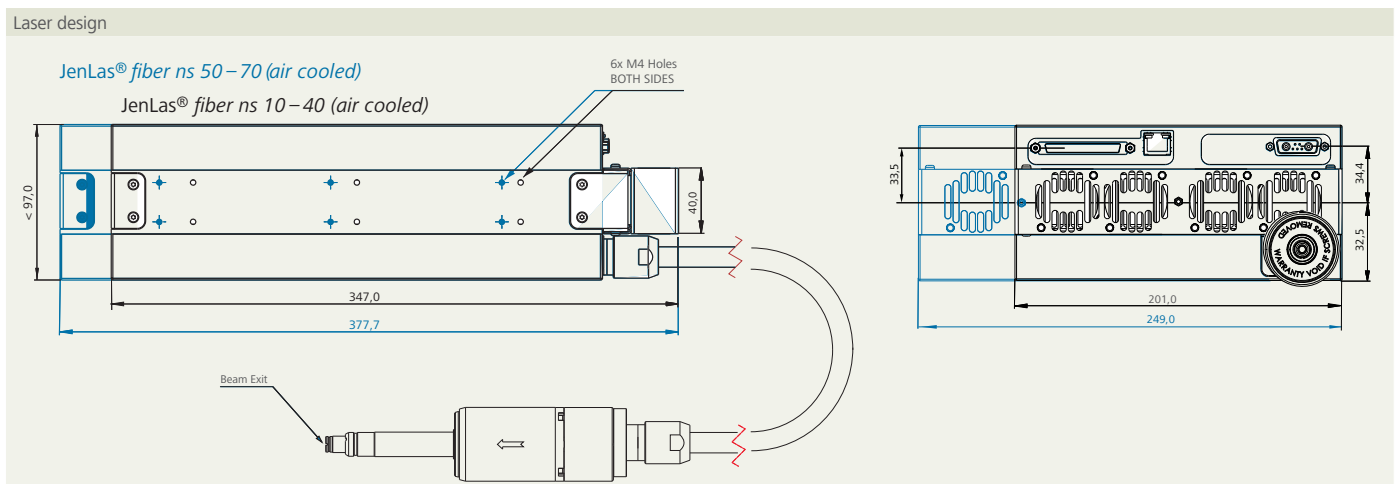
Mechanical specifications									
Size (L x W x H) #	347,0 x 201,0 x 97,0 mm						377,7 x 249,0 x 97,0 mm		
Weight (air cooled)	< 11 kg						~ 13 kg		
Operation temperature									
Environment temp.	0°C–45°C	0°C–45°C	0°C–45°C	0°C–45°C	0°C–45°C	0°C–45°C	0°C–40°C	0°C–40°C	0°C–40°C

air cooled variant

Electrical specifications									
Laser head power supply	24V/8A	24V/10A	24V/8A	24V/10A	24V/13A	24V/13A	24V/13A	24V/13A	24V/25A

Cooling options									
air-/water-cooled	• / -	• / •	• / -	• / •	• / •	• / -	• / •	• / •	• / •

Accessories									
<ul style="list-style-type: none"> • Beam collimators (F30, F50, F75, F100) • Interface board 									



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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