

# LIEKKI<sup>®</sup> laser fibers

Delivering light for continuous wave and pulsed fiber lasers



## Applications

- **Pulsed & CW Fiber Sources**  
Widely deployed in industrial, medical, sensing, and telecom applications.
- **1  $\mu\text{m}$  – 1.5  $\mu\text{m}$  – 2  $\mu\text{m}$**   
Now available with Ytterbium (Yb), Erbium (Er) or Thulium (Tm) doping.
- **Power Delivery**  
Low-loss passive fibers for high-power delivery.

## Features

- **Direct Nanoparticle Deposition**  
For industry-leading uniformity and consistency.
- **Field-Proven Reliability**  
Thousands of lasers deployed in a variety of industries and applications across the globe.
- **Matched Passive Fibers**  
Designed for lowest splice loss.
- **Custom Fibers**  
Customer-optimized solutions on request.

**nLIGHT**

## Ytterbium Doped Fibers | Selected Product Specifications

Fiber Type	Core (Mode Field) Diameter (μm)	Cladding Diameter (μm)	Core NA	Cladding (Core) Absorption at 920nm (dB/m)	Birefringence, $\geq$ , (1E-04)
<b>Core Pumped Fibers</b>					
Yb1200-4/125	(4.4 ± 0.8)	125 ± 2	[0.2]	(280 ± 50)	-
Yb300-6/125 Yb300-6/125-PM	(7.0 ± 0.5)	125 ± 2	[0.12]	(75 ± 10)	- 2.0
<b>Selected Cladding Pumped Fibers (Cladding NA <math>\geq</math>0.48)</b>					
Yb1200-6/125DC Yb1200-6/125DC-PM	(7.0 ± 0.5)	125 ± 2 125 ± 1	[0.12]	0.55 ± 0.1	- 2.0
Yb1200-10/125DC Yb1200-10/125DC-PM	10.0 ± 1.0	125 ± 2 125 ± 1	0.080 ± 0.005	1.7 ± 0.3	- 1.4
Yb1200-12/125DC Yb1200-12/125DC-PM	12.5 ± 1.0	125 ± 2	0.080 ± 0.005	2.6 ± 0.4	- 1.6
Yb800-20/125DC-PM Yb1200-20/125DC-PM	20.0 ± 1.5	125 ± 2	0.065 ± 0.004 0.080 ± 0.005	5.1 ± 0.75 6.5 ± 1.1	0.8 0.8
Yb1200-12/250DC	12.5 ± 1.0	250 ± 5	0.080 ± 0.005	0.6 ± 0.1	-
Yb1200-14/250DC	14.0 ± 1.0	250 ± 5	0.070 ± 0.005	0.75 ± 0.1	-
Yb1200-25/250DC Yb900-25/250DC-PM	25.0 ± 1.5	250 ± 5 250 ± 3	0.070 ± 0.005 0.059 ± 0.004	2.3 ± 0.3 2.3 ± 0.5	- 1.6
Yb1200-30/250DC Yb1200-30/250DC-PM	30.0 ± 2.0	250 ± 5	0.070 ± 0.005 0.062 ± 0.005	3.3 ± 0.6 3.4 ± 0.6	- 1.4
Yb800-20/400DC (HP) Yb800-22/400DC (HP) Yb800-20/400DC-PM	Contact nLIGHT sales for more details on nLIGHT's new 3kW-level fibers for advanced laser applications.				
Yb600-30/400/460DC Yb1200-30/400/460DC Yb800-34/460/530DC	Contact nLIGHT sales for more details on nLIGHT's 5kW-level Triple-Clad (All-Glass) Fibers.				
3C <sup>®</sup> optical fibers	Contact nLIGHT sales for more details on nLIGHT's Yb-doped Chirally-Coupled-Core (3C <sup>®</sup> ) fibers with core diameters up to 85μm.				

## Thulium Doped Fibers | Selected Product Specifications

Fiber Type	Core Diameter (μm)	Cladding Diameter (μm)	Core NA	Cladding Absorption at 790nm (dB/m)
<b>Selected Cladding Pumped Fibers (Cladding NA <math>\geq</math>0.48)</b>				
Tm1500-10/125DC	10.0 ± 1.0	125 ± 2	0.15 ± 0.01	9.5 ± 2.5

## Erbium Doped Fibers | Selected Product Specifications

Fiber Type	Mode Field Diameter at 1550nm (μm)	Cladding Diameter (μm)	Core NA	Core Absorption at 1530nm (dB/m)	Dispersion Parameter at 1550nm	Birefringence, $\geq$ , (1E-04)
<b>Core Pumped Fibers</b>						
Er30-4/125 Er40-4/125 Er110-4/125	6.5 ± 0.5	125 ± 2	[0.2]	30 ± 3 40 ± 4 110 ± 10	negative	-
Er80-4/125-HD-PM Er110-4/125-PM	6.5 ± 0.5 6.5 ± 1.0	125 ± 2	[0.2]	80 ± 20 110 ± 20	negative	1.0
Er16-8/125 Er80-8/125 Er80-8/125-PM	9.5 ± 0.8	125 ± 2	[0.13]	16 ± 3 80 ± 8 80 ± 16	positive	- - 1.0

For complete product offerings and specifications contact: [fibers@nlight.net](mailto:fibers@nlight.net) | [www.nlight.net](http://www.nlight.net)

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