

NEW

Monolithic Direct-Pumped Pulsed Fiber Amplifier

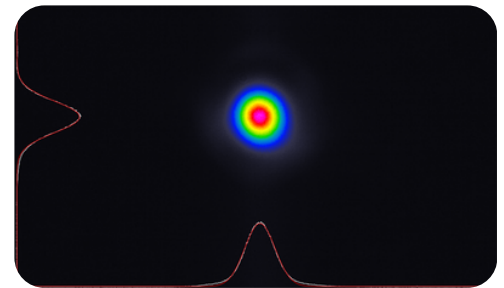
By maintaining an all-fiber construction, CPTEC eliminates the need for alignment and prevents contamination of critical components. This reduces the effects of thermal lensing and mechanical sensitivity in comparison to bulk amplifiers while also minimizing self-phase modulation.

Based on the Yb700-85/320DC-3C fiber from nLIGHT it is a high-performance ytterbium-doped fiber optimized for high-power, single-mode laser applications. The Large Mode Area supports high pulse energies while maintaining excellent beam quality and is ideal for applications requiring high brightness, polarization stability and power scaling.

Optical	Unit	Specification
Gain, Bandwidth	nm	1060-1080
Gain	dB	30 @ 1064nm
Output Power, CW	W	<330W
Peak Power	kW	<1600
Pulse Energies	mJ	<5
Beam Quality	M ²	<1.2
Ellipticity	%	≥90
PER	dB	>15
Input		
Pump Power	W	<500
Pump Fiber	um	200/220 0.22NA
Wavelength	nm	976 (stabilized)
Seed Power	mw	10-10000
Signal Fiber	um	PM14/125 or 25/250 DC
Mechanical		
Dimensions (LxWxH)	mm	100 x 100 x 2000
Weight	kg	<5
Environmental		
Operating Temperature	°C	10 to 40
Storage Temperature	°C	-20 to 60

Features

- All-fiber design
- Plug and Play Functionality
- No free-space coupling
- Alignment insensitive
- Space-qualified design
- Integrated collimator



Applications

- Ultrafast Amplifiers
- Material Processing
- LIDAR/LADAR
- Digital Laser Array
- Medical Processes

