

# Crystal Fiber Waveguide

Yb: YAG + Er: YAG



## GENERAL DESCRIPTION

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Compare with glass optical waveguides, the crystal fiber waveguide adopted rare earth ion doped YAG crystals as core and cladding, which has higher thermal conductivity and can greatly increase the upper limit of output lasing power. More importantly, these crystal fiber waveguides have much lower SBS gain coefficient than silica glass fibers. By engineering the size and materials of both core and cladding, we developed a large mode area Yb:YAG crystal waveguide under single mode beam quality. The 400 $\mu$ m x400 $\mu$ m square core with 1mm diameter Er:YAG cladding is an ideal material for high energy ultrafast lasers.

## FEATURES

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- Large mode area design
- High thermal conductivity
- Low SBS gain coefficient
- Ideal for high energy ultrafast lasers

## SERVICE

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We design and develop composite crystals which are optimized to meet the specific requirements of your applications.

## APPLICATIONS

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- High energy ultrafast lasers
- High performance DPSS lasers

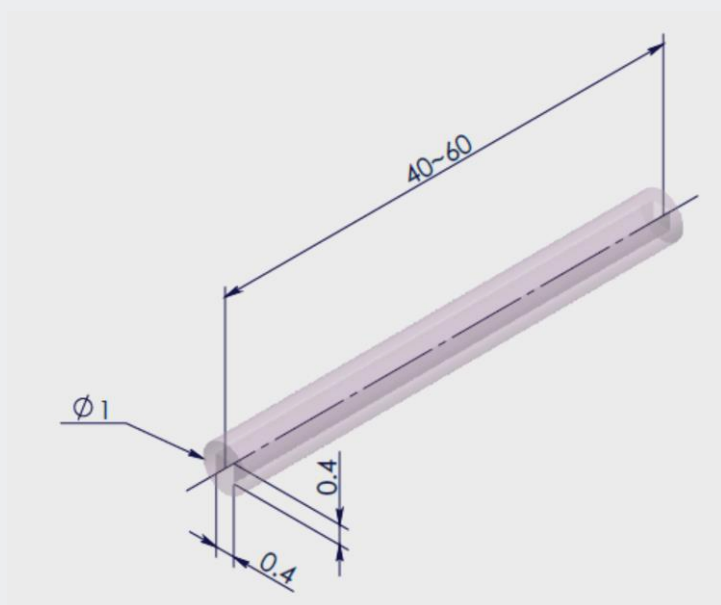
## Specifications

### *Yb: YAG + Er: YAG*

Parameter	CFW-YAG
Core dopant type, Concentration	Yb: YAG, 1.0at.%
Core cross section	400 $\mu$ m x 400 $\mu$ m
Cladding type	Er: YAG
Cladding diameter	1000 $\mu$ m
Crystal fiber length	40mm-60mm
End-face configuration	Flat/ Flat
Side specifications	Polish
Coating	AR@1030nm; AR@940nm

## Dimensions

Unit: mm



4in1 Photonics LLC.  
8407 Central Avenue, Suite#2084  
Newark, CA 94560, US  
[www.4in1photonics.com](http://www.4in1photonics.com)

China office  
Rm.705, Block E, Taihua Longqi Square  
Huangping Rd. Changping Dist., BJ, 100096  
Tel: +86 10 82911602