

# DCF-YB-8/128P-FA

## Yb-doped fiber for pulsed lasers



This phosphosilicate fiber is ideal as a gain medium for lower power amplifiers or the pre-amplifier stage and is mainly used in a MOPA configuration of a pulsed fiber laser. On top of all the benefits found in a phosphosilicate fiber (photodarkening-free and high absorption), this fiber shows high energy saturation, which is essential for applications such as laser marking and engraving.

## Features & Benefits

- Strictly single-mode operation and low splice loss with passive matching fibers for excellent beam quality
- **Photodarkening-free** – ensures stable long-term operations
- Wide, flat absorption from 910 nm to 970 nm – reduces pump cooling requirements and allows 940-960 nm pumping

## Applications

- Pulsed fiber lasers: gain media in pre-amplifiers or low power amplifiers for MOPA configuration
- Material processing: laser marking, laser engraving, micromachining and welding
- Medical Applications

## Related Products

- [DCF-UN-8/125-10](#)  
Matched double-clad fiber
- [SCF-UN-8/125-10](#)  
Matched single-clad fiber

## Specifications

### Optical

Cladding Absorption @ 915 nm (dB/m)	1.8 ± 0.3
Cladding Absorption @ 975 nm - Nominal (dB/m)	10.8
Numerical Aperture - Core	0.10 ± 0.02
Numerical Aperture - Cladding	> 0.45

### Geometrical & Mechanical

Core Diameter (µm)	8 ± 1
Cladding Diameter (µm)	128 ± 3
Core/Cladding Concentricity Error (µm)	< 1.5
Cladding Geometry	Octagonal
Coating Diameter (µm)	260 ± 20
Proof Test (kpsi)	≥ 100

ISO 9001:2015 certified quality system | RoHS and REACH compliant.  
All specifications are subject to change without notice. Reference: 101-10-0560.R1