ofs
A Furukawa Company

TrueXMF™ Yb 200/375 Optical Fiber

P/N: 7000820

Features and Benefits

- Ultra-large multimode core enables kilowatt average power, high pulse energy amplification with low nonlinearity
- Designed for high efficiency and low thermal load
- OFS high-volume manufacturing processes ensure lot to lot consistency and lower-cost fiber to the customer
- TrueClad™ low-index coating for extensive durability in sensitive environments and operating conditions

Overview

Development of the new TrueXMF Optical Fiber was driven by increasing demand for high pulse energy requirements in industrial surface treatment applications. The TrueXMF Optical Fiber builds upon the OFS TrueLase™ Optical Fiber family designed for kilowatt single-mode fiber lasers for industrial machining and welding. OFS, a global market leader in the design and manufacture of rare-earth doped fibers, possesses the expertise and experience in fiber fabrication necessary to meet that demand. OFS has been developing and manufacturing high-power components and modules for many years and understands the reliability standards expected in the diverse material processing applications.

The TrueXMF Optical Fiber is an ideal tool for integrated, high-power fiber lasers and amplifiers designed for a wide variety of low coherence and high peak power, high average power, high pulse energy applications. Our fibers are produced from precision preform manufacturing process for high purity and high reliability, and unprecedented manufacturing control ensuring easy integration across the entire laser architecture. TrueXMF Optical Fiber utilizes the latest TrueClad low-index polymer coating specially engineered to ensure superior reliability and performance in the most demanding of environments.

Fiber amplifier modules using TrueXMF Yb 200/375 fiber are also available.

Typical Applications

Pulsed fiber lasers for surface treatment

Low coherence sources

Multi-kW multimode lasers and amplifiers

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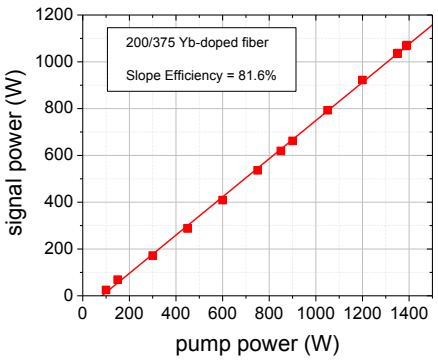
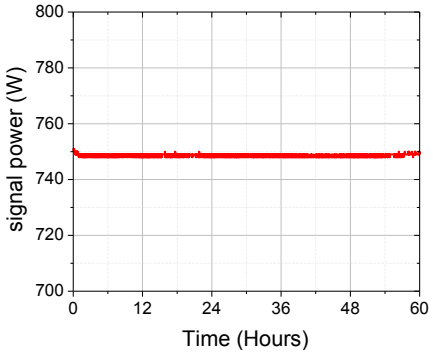
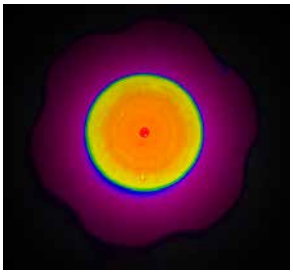
TrueXMF 200/375 Kilowatt Operation



TrueXMF 200/375 Burn-in



Near Field Image of the Multimode Output Beam



Optical Properties

Designed for:

- Kilowatt average power
- High efficiency
- High pulse energy
- Ultra-low photo darkening
- Large core diameter enables high pulse energies
- OFS proprietary MCVD process ensures high purity and high reliability
- Double clad design allows for better pump absorption
- Excellent glass homogeneity inhibits NA-bloom of low-divergence signals

Mechanical Properties

- Superb core to clad concentricity due to expert fiber fabrication
- Designed for low thermal load
- OFS proprietary TrueClad™ coating ensures high reliability and excellent damp and dry heat

Product Specifications	
Product Description	**TrueXMF Yb 200/375**
Physical Characteristics	
Coating Material	TrueClad
Core Numerical Aperture	0.12
Core Diameter	200 ± 7 µm
Fiber Diameter	375 ± 10 µm
Coating Diameter	540 ± 20 µm
Fiber Geometry	Shaped
Optical Characteristics	
Type	Ytterbium
Core Background Loss @1150	0.025 dB/m
Cladding Background Loss @1300 nm by OTDR	20 dB/km
Cladding Numerical Aperture	≥ 0.45
Cladding Absorptiion @915 nm	1.1 dB/m
Mechanical and Environmental	
Proof Test Level	≥ 100 kpsi
Order by Part Number	**7000820**

For additional information please contact your sales representative.

You can also visit our website at www.ofsoptics.com or call 1-888-fiberhelp (1-888-342-3743) USA or 1-770-798-5555 outside the USA.

OFS Marketing Communications
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