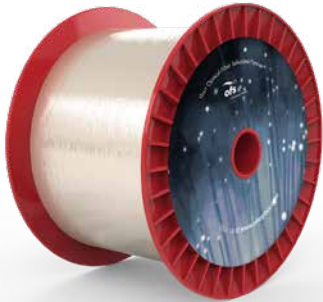




A Furukawa Company

## TrueLase™ LMA Yb 16/250 Optical Fibers

P/Ns: 88146, 88147



### Features and Benefits

- Enables easy & efficient integration for monolithic fiber lasers and amplifiers
- Excellent fiber consistency and uniformity using OFS proprietary RE vapor phase delivery process
- TrueClad™ low index coating for extensive durability in sensitive environment and operating conditions

### Overview

Development of the new OFS TrueLase Optical Fiber family was driven by an increasing demand for a reliable fiber supply in the rapidly growing fiber laser market space. Fiber lasers had their start in the erbium doped amplification work done in the early 1990's. OFS, a global market leader in the design and manufacture of Erbium-Doped Optical Fibers, possesses the expertise and experience in fiber fabrication technology 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 OFS family of TrueLase 16/250 Active and Passive LMA Double Clad Optical Fibers is an ideal tool for integrated high power fiber lasers and amplifiers. Our fibers combine high clad absorption, precision matched mode field diameter designs, and unprecedented manufacturing control ensuring easy integration across the entire laser architecture. All TrueLase optical fibers utilize the latest TrueClad low index polymer coating specially engineered to ensure superior reliability & performance in the most demanding of environments.

### Typical Applications

High power fiber lasers and amplifiers

Lasers for material processing  
Industrial, medical and military



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	YB16-250-OCTA-L1	YB16-250-OCTA-L2
Part Number	88146	88147
<b>Optical Specifications</b>		
Core diameter	16.5 μm	
Core background loss (@ 1150 nm)	≤10 dB/km	
Cladding background loss (@ 1100 nm)	≤10 dB/km	
Cladding numerical aperture	≥0.45	
<b>Physical and Material Parameters</b>		
Cladding diameter (flat to flat)	250 ± 3 μm	
Coating diameter	400 ± 15 μm	
Coating type	TrueClad™ low index	
Fiber geometry	Octagonal Shape	
<b>Specifications</b>		
Effective Area @ 1070 nm	155 - 180 μm <sup>2</sup>	
Cladding absorption at 915 nm	0.65 - 0.95 dB/m	
Fundamental Mode Bend Loss @Ø12 cm	< 0.1 dB/m	
<b>Performance</b>		
Proof test	100 kpsi	
Fiber efficiency (with respect to 2W launched signal power) at > 15 dB pump absorption	>76%	
Max. Bend Ø recommended	24 cm	
Min. Bend Ø recommended	14 cm	
Best for *Max. power at beginning of lifetime signal power level when final device slope efficiency >72%. Power drop expected in 300 hour <4.5% due to photodarkening.  When recommended bend diameter is used and adequate heat sinking is implemented.	1.2 kW Bi-Directional Pumped*	1.5 kW Bi-Directional Pumped*



For additional information please contact your sales representative.

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



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