

TrueXMA™ Multimode Amplifier Module

P/N: 7000633-01



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
- Fiber amplifier built using TrueXMF™ Yb 200/375 Optical Fiber
- Module design allows for rapid prototyping

Overview

Development of the new TrueXMA Multimode Amplifier Module was driven by increasing demand for high pulse energy requirements in industrial surface treatment applications. The TrueXMA Multimode Amplifier Module builds upon the TrueMode™ Fiber Laser Cavity 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, possess 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.

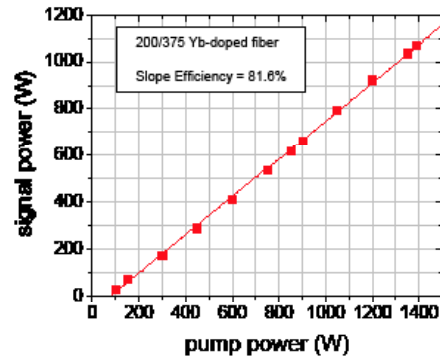
TrueXMF Yb Multimode fiber available separately.

Typical Applications

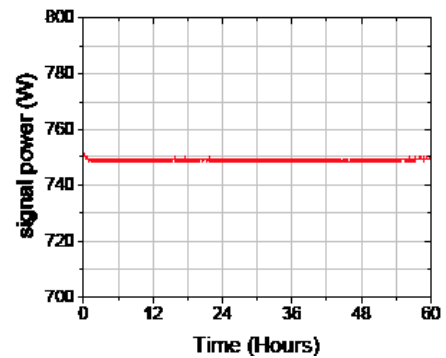
Ablation
Paint Removal
Structure Cleaning
Texturing
Coating Removal
Rust Removal

Product Specifications	
Product Description	TrueXMA™ Multimode Amplifier Module
Performance	
Operating Wavelength	1070 ± 10 nm
Maximum Output Power (CW)	1000W
Efficiency	> 70% with 10W seed average power
Beam quality	Multimode Output Beam
Seed laser requirements	> 4W average power, Wavelength 1070 ± 10 nm
Divergence (Full Angle)	178 mrad
Pump Fiber Legs	
Number of Pump Fiber Legs	11
Fiber Type	0.22 NA / 110 µm core / 125 µm cladding
Fiber Length (m)	> 1.5 m
Single Input Fiber	
Fiber Type	0.22 NA / 110 µm core / 125 µm cladding
Fiber Length (m)	> 1.5 m
Output Fiber	
Fiber Type	0.22/0.46 NA / 300 µm core / 330 µm cladding
Fiber Length (m)	> 1.5 m
Features	
Output Power Monitor	Electrical output
Operation & Storage	
Operating Coolant Temperature	< 25 °C
Transport & Storage Temperature	-20 to +60 °C
Transport & Storage Humidity	< 85% (non-condensing)
Approximate Dimensions (mm)	475 x 320 x 21
Connector / Ribbon Cable Descriptions	
Cable Length	800 ± 5 mm
Pump Diode Requirements	
Fiber Type	110/125 µm
Numerical Aperture Pigtail Fiber	0.22
NA Filling	0.15 (95% power content)
Parameters	
Center Wavelength	915/976 nm
Isolation	Filtering required at operating wavelength
Part Number	7000633-01

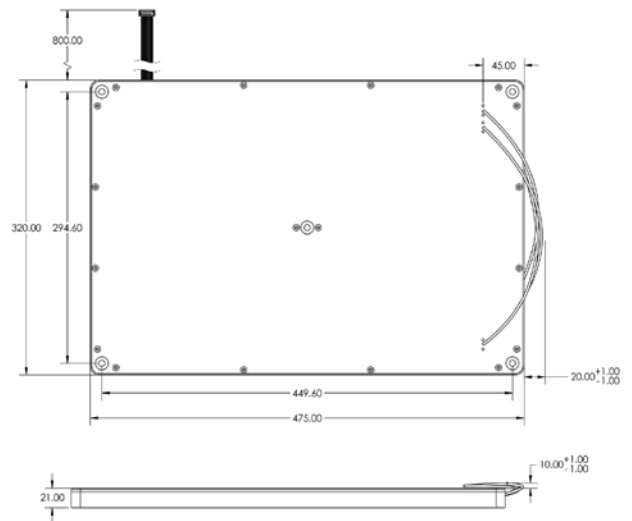
TrueXMF 200/375 Kilowatt
Operation



TrueXMF 200/375 Burn-in



TrueXMA Mechanical Drawing



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.



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