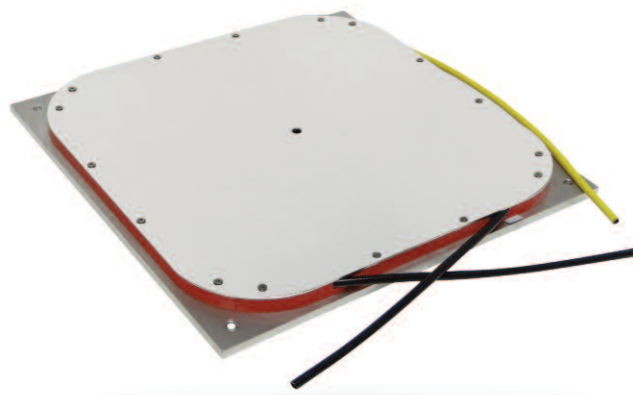




A Furukawa Company

Your Optical Fiber Solutions Partner®

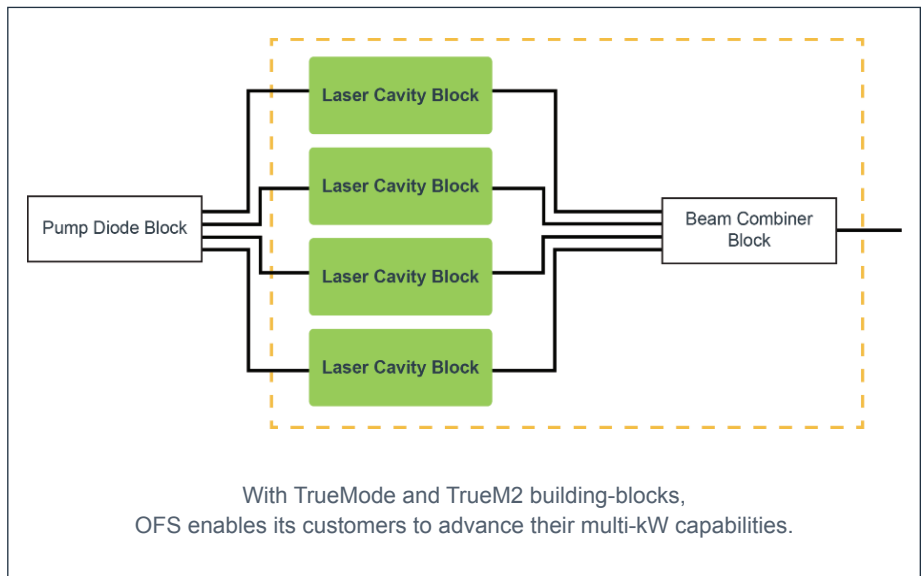
# TrueMode™ Fiber Laser Cavities



OFS has been developing and manufacturing high power components and modules since the early years of fiber lasers. Today, we continue to introduce new products in this area. OFS' proprietary technology in the areas of optical fibers and components are integrated in our TrueMode Fiber Laser Cavity and TrueM2™ Beam Combiner platforms. These platforms enable machine manufacturers to build their own fiber laser source using worry-free modular architecture, enabling them to produce a customized fiber laser based on their specific requirements and target market.

OFS TrueMode Fiber Laser Cavities provide a complete platform with matching internal components that enable delivery of up to 1kW of true single-mode output. The customer is able to

select pump diodes of their choice (commercially available or customer's in-house design). The true single-mode design, and its near ideal splice loss capability, provides our customers an optical engine with consistent high optical-to-optical efficiency and beam quality.



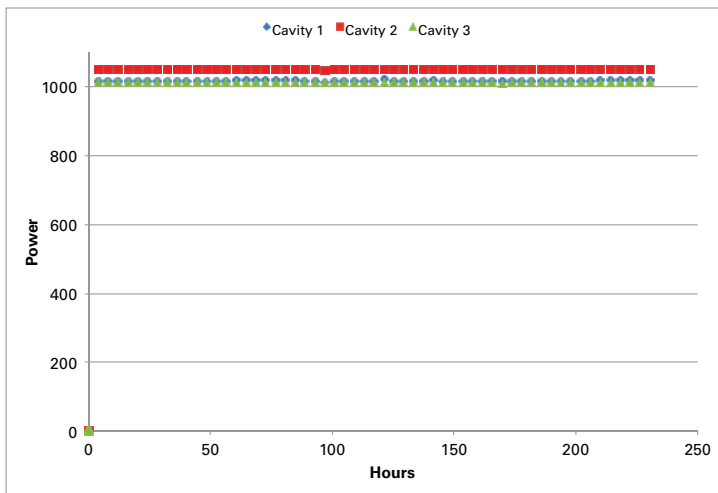
With TrueMode and TrueM2 building-blocks, OFS enables its customers to advance their multi-kW capabilities.

OFS TrueMode cavities are now categorized by performance level: TrueMode-SP and TrueMode-kW. The TrueMode-SP can deliver up to 550W of output power and is designed for use in 500W applications. Providing 8 pump ports, it is designed for use with diodes delivering greater than 100W of pump power. The TrueMode-kW is designed for kW and, when used with our TrueM2 Beam Combiners, multi-kW applications. With up to 36 pump ports, the

TrueMode-kW cavity can be used with diodes delivering greater than 50W of pump power. The breakthrough design of the TrueMode-kW cavity uses large numerical aperture pump diodes and incorporates a large pump diode count. It provides 1kW output with minimized non-linear effects and optimized thermal performance.

	TrueMode-SP		TrueMode-kW	
Configuration	500W stand alone		1kW stand alone	Multi-kW kit
Max output power	550W		1100W	
Compatibility	N/A		N/A	TrueM2-14
Center wavelength (nm)	1070 ± 5 nm			
Optical efficiency (%) (with 915 nm pump)	>68%			
<b>Pump Diode Requirements</b>				
Maximum number of input ports	8		36	36
Diode fiber pigtail	105-110/125			
Fiber numerical aperture	0.22		0.22	0.22
<b>Beam Delivery</b>				
Output fiber	20/400		20/400	14/200
Beam quality M2	<1.1		Single-mode output	
<b>Features</b>				
Output power monitor	Photodiode output			
Visible pilot	14/200 fiber		14/125 fiber	14/125 fiber
Transport and storage (temp)	-20 to 60 °C (Non-condensing under operation and storage)			
Approximate dimensions (mm)	300 x 300 x 17 mm			
Item #	7000500-SP		7001000-02	7001000-01

True Single-mode  
for True High Performance Consistency



Universal Pump Acceptance

