

# 2 $\mu$ m High Power Fiber Collimator with Isolator

## (100W CW, SM, LMA, DCD, PM Fibers)

(protected by patents: US7920763B1 US7715664B1)

### Product Description

This passive device transmits high power light from input fiber into a free space collimated output beam while blocking the unwanted light from back reflection and scattering. Agiltron's proprietary magnetic-optics technology and advanced end-cap technique enable industrial leading performance in power handling, low loss, reliability, and cost effective. Agiltron currently provides a full range of polarization-independent, polarization maintaining, and custom design versions with a broad wavelength coverage and various output beam diameters. We have experience to incorporate special fibers.



### Performance Specifications

FSOI High power Isolator	Min	Typical	Max	Unit
Operation Wavelength		2000		nm
Insertion Loss <sup>[1]</sup>		0.6	1.2	dB
Isolation	20	25		dB
Extinction Ratio <sup>[6]</sup>		25	30	dB
Polarization Dependent Loss		0.1	0.2	dB
Polarization Mode Dispersion		0.1	0.2	ps
Return Loss	40	50		dB
Optical Power Handling <sup>[2][4]</sup>			100	W
Beam Size <sup>[3]</sup>	0.4	1	5.5	mm
Fiber Type	See Order Information			
Storage temperature		-10 to 60		°C
Storage Humidity		5% to 95% (No Condensation)		
Package Dimension <sup>[5]</sup>		33x34x110		mm

Note:

- [1] Measured without connectors
- [2] Continuous operation. For pulse operation, please call us.
- [3] For beam size larger than 1 mm, please call us.
- [4] Back Reflect < 10%. For >10% application, please call us.
- [5] For beam larger 5 mm, the package is only estimated. The real size may be different.
- [6] For PM fiber only.

### Features

- High Power Handling
- High Isolation
- High Reliability
- Low IL, PDL & TDL
- Cost Effective

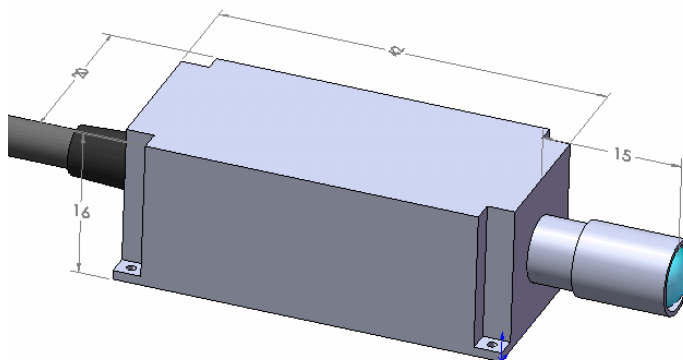
### Applications

- Laser Pump Source
- Optical Fiber Amplifier
- Laser Manufacturing
- laser Marking

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## Mechanical Footprint Dimensions (mm)



Typical 2000 mm isolator package dimension (only for 1 mm beam size)

\*Product dimensions may change without notice. This is sometimes required for non-standard specifications.

## Ordering Information

FSOI-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Type	Wavelength	Power handling	Beam size	Fiber Type		Fiber Length	Connector
	SM=1 PM=2 Special=0	2000nm =2 Special=0	10W=01 20W=02 30W=03 50W=05 100W=10	1.0mm=1 2.0mm=2 3.0mm=3 4.0mm=4 5.0mm=5 Special=0 (@1/e <sup>2</sup> )	SMF28=2 PM 1550=3 SM1950=4 SM2000=5 PM1950=6 Hi1060=1 PM980=9 Special=0	Bare fiber=1 900um loose tube=3 3 mm loose cable=4 Armor cable (3 mm)=6 Armor cable (5 mm)=7 Special=0	0.25M=1 0.5M=2 1.0 M=3 Special=0	None=1 FC/PC=2 FC/APC=3 SC/PC=4 SC/APC=5 ST/PC=6 LC/PC=7 LC/APC=8 SMA905=9 Special=0