

High Power Fiber Collimator with Isolator 1310nm-2400nm (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	1310		2400	nm
Insertion Loss ^[1]		0.6	1.2	dB
Isolation	20	25		dB
Extinction Ratio ^[6]		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 ^{[2][4]}			100	W
Beam Size ^[3]	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 ^[5]	33x34x110			mm

Note:

- [1] Measured without connectors, 2400nm may have larger loss depend on fiber choice
- [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

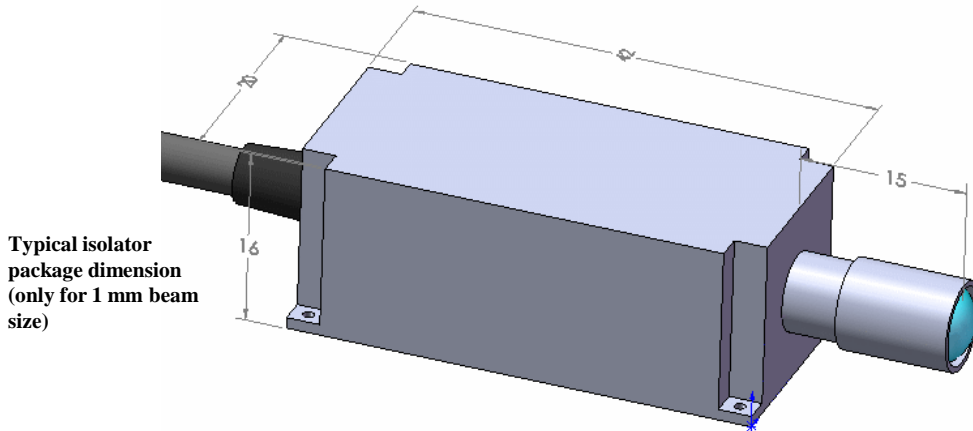
Applications

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

2 μm High Power Fiber Collimator with Isolator

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

Mechanical Footprint Dimensions (mm)



*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"/>	<input type="checkbox"/>
Type	Wavelength	Power Handling	Working* Distance	Beam size	Fiber Type	Fiber Length	Connector		
SM=1 PM=2 Special=0	1310nm=3 1550nm=5 1630nm =6 2000nm =2 Special=0	10W=1 20W=2 30W=3 50W=5 100W=9	0.1m=1 0.2m=2 0.3m=3 0.4m=4 0.5m=5 0.6m=6 0.7m=7 0.8m=8 0.9m=9 Special=0	1.0mm=1 2.0mm=2 3.0mm=3 4.0mm=4 5.0mm=5 Special=0 (@1/e ²)	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	

*Customer must provide a working distance. We will optimize and test at the working distance point. The collimator may not meet spec off the working distance.

Warning: An Optical Collimator need to have a working distance stated by the customer at the time of order