

1030nm 200W Fiber-to-Free Space Isolator



● Product Description

The fiber-to-free space isolators from IdealPhotonics' can be divided into three main types: beam-expanding output type, beam-expanding output type with indicator light, and non-beam-expanding output type. They have center wavelengths of 980nm, 1030nm, and 1064nm, with an average power handling capability of up to 200W. These isolators are widely used in the industrial processing field and can effectively maintain the frequency stability of fiber lasers, fiber amplifiers, and optical sensors. This product can be customized according to customer requirements, including

operating wavelength, size, and power handling capacity.

● Product features

Operating Wavelength: 980/1030/1064nm 、 Peak Isolation: \geq 35dB 、
Maximum Average Power: Up to 200W 、 Fiber Input, Beam Expanding
Output、 Fiber Type: Customizable

● Part Number

MP-ISO-S-1030-G-S-5.5

● Application area

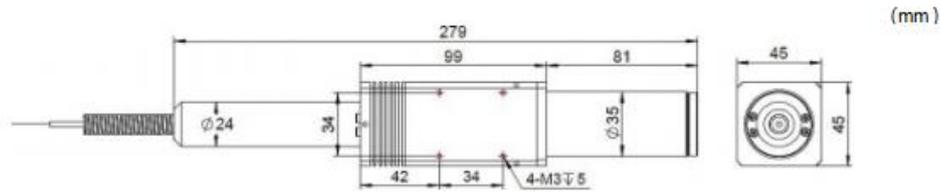
Maintaining the Frequency Stability of Fiber Lasers and Fiber Amplifiers、
Fiber Measurement Equipment and Optical Coherence Detection、 Laser
Industrial Processing

● Core parameters

Central Wavelength	Min Isolation	Operating Power
1064nm	30dB	200W



● Dimension Drawing



● General Parameters

PN#/Ordering info

MP-ISO-①①-②②②-③③-④-⑤-⑥-⑦

①①: Center Wavelength	03 - 1030 nm, 06 - 1064 nm, SS - Specify
②②②: Operating Power	200 - 200W, SS - Specify
③③: Coating Type	8 - 8 mm Universal bendable metal cooling tube (Bending diameter 80 mm), SS - Specify
④: Coating Length	1 - 1.0 m, SS - Specify
⑤: Fiber Length	2 - 2.0 m, SS - Specify
⑥: Working Axis	F - Fast axis blocked
⑦: Fiber Type	1 - Nufern PLMA-GDF-25/250-M, 2 - Nufern PLMA-GDF-30/250-M, 3 - Nufern PLMA-GDF-25/400-M, SS - Specify



Technical Parameters

Parameter	Unit	Value
Central Wavelength (λ_c)	nm	1064
Minimum Extinction Ratio	dB	20
Max Insertion Loss at 23°C, λ_c @1064nm	dB	0.4
Typical Peak Isolation	dB	40
Min Isolation at 30°C	dB	30
Min Full Temperature Isolation	dB	20
Min Return Loss	dB	50
Output Beam Size ($1/e^2$)	mm	5.5 ± 0.5
Beam Circularity	%	> 90
M2 Degradation	%	< 10
Max Average Power	W	200
Max Nanosecond Pulse Peak Power	kW	50
Max Cladding Average Power	W	5
Reverse Power Handling	W	3W Continuous
		30W (3 min max)
Fiber Type (input port)		Specified by ordering info
Operating Temperature	°C	10 to +50
Storage Temperature	°C	0 to +60