Advanced Fiber Resources (Hong Kong), Ltd.

1064 nm 1000 W Fiber to Free-space Isolator

Spec. Review No. SR34632 Date: Feb. 10, 2026

AFR's high power fiber to free-space isolator (HPFSI) is the best choice for high power industrial pulse fiber lasers. With unique patented technology, the power handling capacity was elevated to 1000 W average laser power

Key Features

- High Power Handling
- Low Insertion Loss

Applications

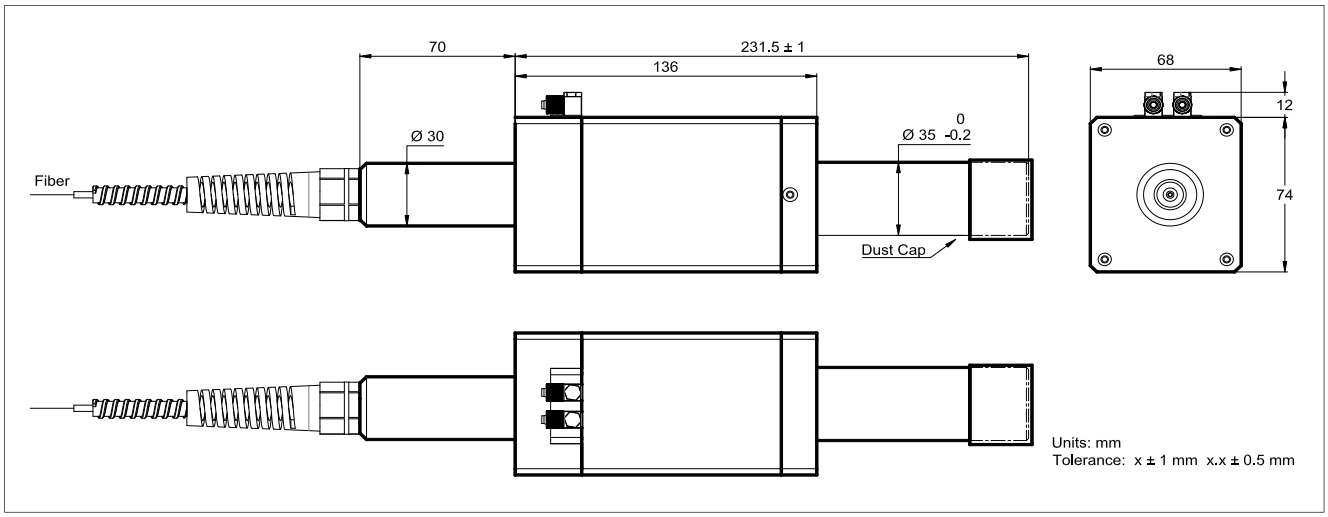
- Fiber Laser
- Fiber Optic Instruments

Specifications

Optical Parameter	**Unit**	**Values**
Operating Wavelength (λc)	nm	1064
Max. Insertion Loss at 23 ℃, λc	dB	0.4
Typ. Peak Isolation	dB	40
Min. Isolation at 28 ℃	dB	30
Min. Isolation at All Temperature	dB	20
Min. Return Loss	dB	35
Nominal Output Beam Diameter ($1/e^2$) @ M^2 = 1.5	mm	7.5 ± 1
Beam Circularity	%	> 90
M^2 Degradation	%	< 10
Focal Shift	Z_R	< 0.5
640 nm Transmission	%	> 20
Max. Average Optical Power	W	1000
Max. Peak Power for ns Pulse	kW	300
Beam Offset	mm	< 1.0
Pointing Error	mrad	< 2.5

Fiber and conditions	**Unit**	**Values**
Fiber Type	-	Specified by Ordering Info
Cooling	-	Water
Water Quality	-	Purified or Distilled Water
Flow Rate	L/min	1.5 - 2.5
Water Pressure	Mpa	≤ 0.3
Water Temperature	-	≥ 5 °C Above Dew Point Temperature
Water PH Value	-	5.6 - 7.9
Operating Temperature	℃	+ 10 to + 50
Storage Temperature	℃	- 20 to + 60

Package Dimensions



Ordering Information

HPFSI-1000-①①①①-②-③-④-⑤-⑥-**P**

①①①①: Wavelength
1064 - 1064 nm
SSSS - Specify

②:Beam Diameter
7.5 - 7.5 mm
S - Specify

③: Jacket Type
10 - 10 mm Armoured Cable
S - Specify

④: Jacket Length
5 - 5.0 m
S - Specify

⑤: Fiber Type
1 - 30/250 NA0.065
S - Specify

⑥: Fiber Length
6.5 - 6.5 m
S - Specify

⑦: Power Type
P - Pulse Application
C - Continuous Wave

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