High Power Expanded Beam Isolator, HP(M)EI

Description

The high power expanded beam isolator (HPMEI) is the best Isolator designed for high power pulse fiber lasers. Two versions of design are compatible to lasers of 200W (natural cooling) and 300W (water cooling). With multiple patented technologies, the HPEI delivers unparalleled performance of aberration-free and thermal lensing-free beam quality at any output power level. It also provides high isolation to reflection coming from all spatial angles.

Features

* High isolation and low insertion loss
* PM and Non-PM types are available
* High Beam Quality
* Fiber can be customized

Applications

* Fiber Laser
* Fiber Sensor

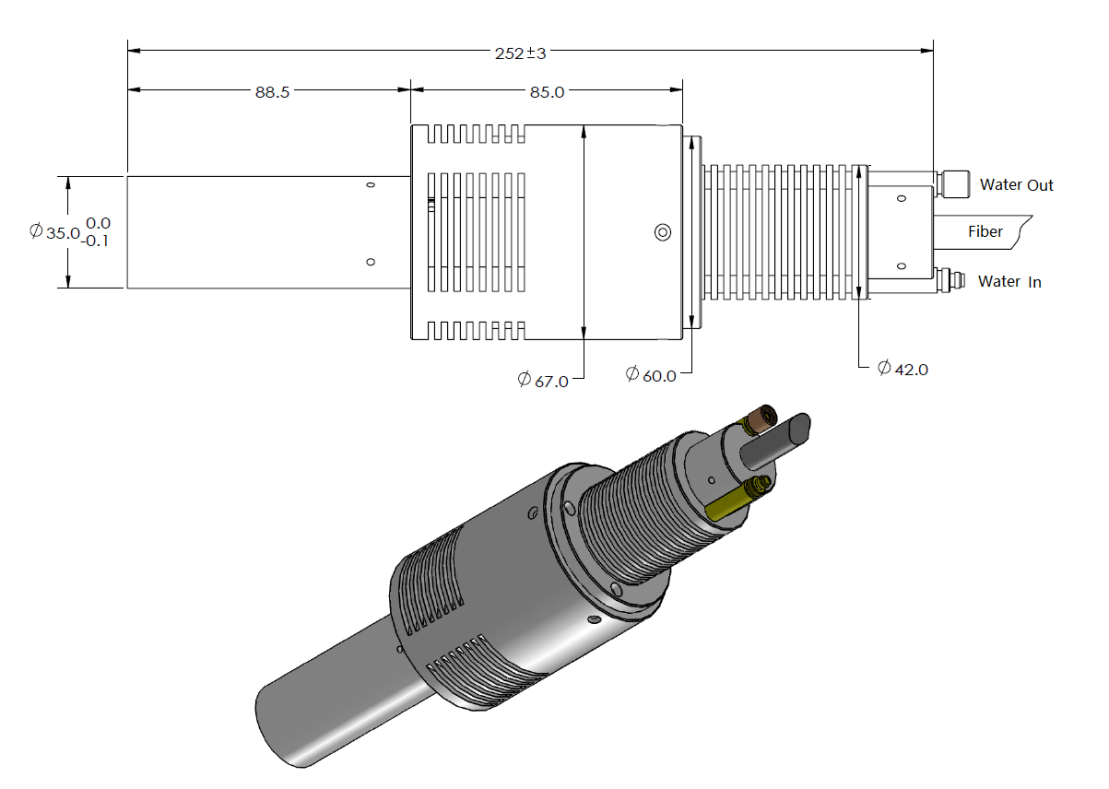
Specifications

Parameter \ Type		High power expanded beam isolator, HP(M)EI	
		Non-PM isolator	PM isolator
Operating wavelength(nm)		1064±5	
Peak isolation (dB)		≥35	
Isolation in band at 23℃(dB)		≥28	
Insertion loss at 23℃(dB)		≤0.50	
Extinction ratio (dB)		/	≥20(fast axis blocked)
Return loss (Input) (dB)		≥45	
Beam Divergence @Fundamental mode (mrad)		≤0.50 (Full Angle)	
Output Beam Ellipticity		≥90%	
Fiber type (can be customized)		30/250 SCF	PM 30/250 SCF
Armored cable diameter		Φ13mm cable, can be customized.	
Output beam diameter@1/e^2 (mm)		7±0.5; Others on demand	
Input max. power handling	Average (W)	≤200（natural cooling）≤300（water cooling）	
	Pulse peak(KW)	50, higher on demand	
Reverse Power Handling		≤20W for 0.5 hour. Max	
Operating Temperature (℃)		-5 ~ +50	
Storage Temperature (℃)		-20 ~ +70	
Dimensions (℄×L mm)		℄67×L252	

* Both Single cladding fiber (SCF) and double cladding fiber (DCF) are available.

*The default fiber length is 3.6m, protective Teflon tube length is 3.1m in a 3m Φ13mm Armored cable.

Mechanical Dimensions (Unit: mm)



Ordering Information

Example：

HPEI-1064-13mm-032-300W-P(50)-7±0.5mm-φ67*252mm-3m-3.6m

HP(M)EI-XXXX-X-X-X-X –X-XX*XX-XX-XX

- All fiber length
- Armored cable length
- Package size: ∅67×L252mm
- Beam diameter
- Average power handling: 200W, 300W etc.
- Power condition: C=Continue Wave, P(10)=Pulse Peak Power(10KW),etc.
- Fiber type: Fiber code
- Armored cable diameter: 13mm, etc.
- Operating wavelength: 1064nm etc.
- HPMEI (PM type), HPEI (Non-PM type)