

# High Power Fiber In & Free Space Out Isolator HP(M)OI

#### **Description**

The high power isolator series includes in-line type, beam expanded isolator, fiber in and free space out isolator and free space isolator etc. they're characterized with low insertion loss, high isolation, high power handling, high return loss, excellent environmental stability and reliability. They are ideal for fiber laser and instrumentation applications.

#### **Features**

- \* High isolation and low insertion loss
- \* PM and Non-PM are available
- \* Excellent environmental stability and reliability
- \* Fiber can be customized

#### **Applications**

- \* Fiber laser
- \* Fiber sensor



HP(M)OI

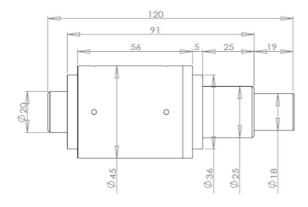
# **Specifications**

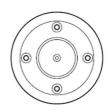
Туре		High power fiber in & free space out isolator, HP(M)OI	
Parameter		Non-PM isolator	PM isolator
Operating wavelength( nm)		1064±5	
Peak isolation (dB)		≥35	
Isolation in band at 23 ℃ (dB)		≥28	
Insertion loss at 23 °C( dB)		≤0.5	
Polarization dependent loss (dB)		≤0.15	/
Extinction ratio (dB)		/	$\geq 18 \text{(Type B)}, \geq 20 \text{(Type F)}$
Return loss (Input) (dB)		≥50	
Fiber type (can be customized)		HI1060, x/125, x/250, etc. (x=10um, 15um, 20um, 30um, etc.)	PM980, PM x/125, x/250, etc. (x=10um, 15um, 20um, 30um, etc.)
Armored cable diameter		Φ10.5mm cable, can be customized.	
Output beam diameter (mm)		0.4-0.6; others on demand	
Input max. power	Average (W)	10, 20, higher on demand	
handling	Pulse peak(KW)	10, 20, higher on demand	
Backward power handling		4W for 5 minutes or 10W for 5 minutes or on demand	
Operating temperature ( $^{\circ}$ C)		-5 ~ +50	
Storage temperature (°C)		<b>-</b> 20 ∼ +70	
Dimensions (⊄x L mm)		<u>⊄ 45xL120</u>	

- \* Both single cladding fiber (SCF) and double cladding fiber (DCF) are available..
- \* Type B: Both axis working, Type F: Fast axis blocked, please make sure the input system light is fast axis blocked and ER>20dB. Otherwise the insertion loss of Isolator might be larger than specification and even lead to isolator failure.
- \* Backward power<10% input power
- \* Dimension can be made on customer request
- \* Insertion loss of light through fiber cladding is not included in the Insertion loss specification



## **Mechanical Dimensions (Unit: mm)**





### **Ordering Information**

