

# 50W 1 Micron High Power Fiber Isolator

## (All-Fiber Structure, No Free Space Element)

### AP-aISO

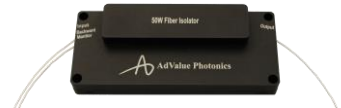
This world's first all-fiber isolator utilizes AdValue Photonics' proprietary fiber technology, eliminating all free-space elements and containing no open optical surfaces. Its design is inherently reliable and ideal for high power fiber laser applications.

An isolator is typically used to block light traveling in the backward direction, preventing instability and damage to a laser system caused by back reflections.

#### Applications:

- Fiber laser systems
- Fiber amplifier systems

**World's First  
All-Fiber  
Isolator!**



#### Features:

- High power
- All-fiber construction with no free-space element
- Extraordinary reliability
- Integrated backward power monitoring port



Multi-Channel Option

#### Optical Characteristics:

Parameter	Specification
	Polarization Maintaining (PM)
Operating Wavelength	1064, 1030 nm
Optical Power (CW)	>50 W
Backward Power Handling	>50 W
Isolation	>20 dB
Insertion Loss	1.5 dB
Min. Return Loss	50 dB
Input/Output Fiber	Panda PM fiber 10/125 $\mu$ m, 0.08 NA, 3 mm jacket, fiber length > 0.5 m
Multi-Channel Option	1-Channel, 2-Channel, or 3-Channel

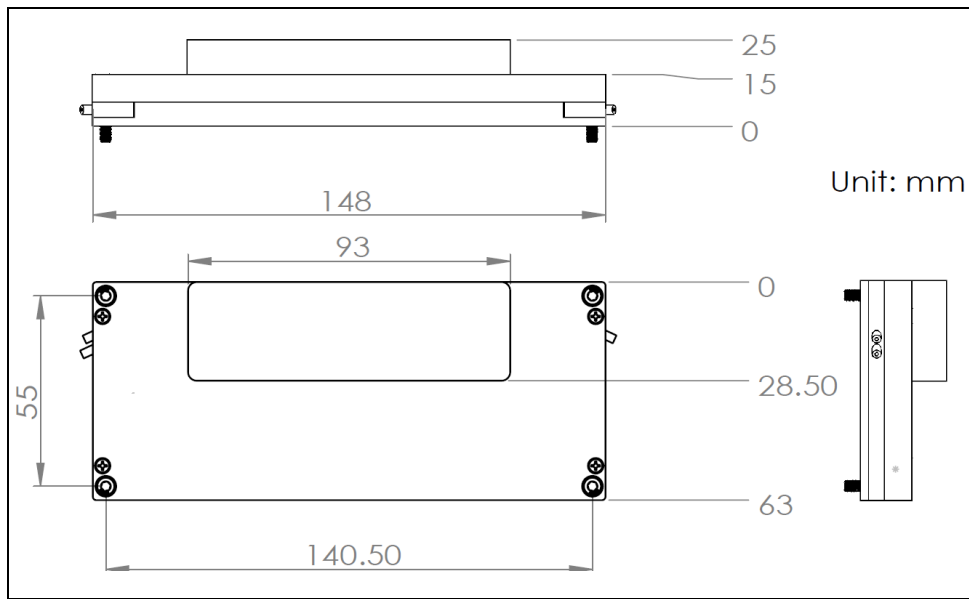
(For special requirement, please contact AdValue Photonics for options.)

*Specifications subject to change without notice*

## General Characteristics:

Parameter	Specification
Maximum Tensile Load	5 N
Operating Temperature	20 to 45 °C
Storage Temperature	-10 to +70 °C
Operating Humidity	0 to 85%
Storage Humidity	0 to 85%
Package Dimensions	148W x 63D x 25H mm

## Mechanical Outline:



## Ordering Information:

Part Number:	AP-aISO	-	xxxx	-	xx	-	xx		
			Standard Wavelength: 1064 = 1064 nm Custom Wavelength: xxxx = xxxx nm		Optical Power: 50 = 50 W xx = xx W		Polarization: PM = polarization maintaining		

Units: mm

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