

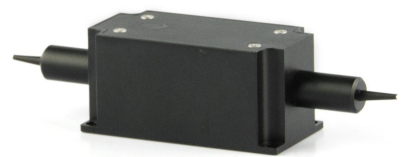
In-Line Isolators

In-line isolators can be divided into two categories according to the fiber types: non-polarization-maintaining and polarization-maintaining in-line isolators.

The non-polarization-maintaining type consists of birefringent crystals, Faraday rotator, half-wave plate or polarizer, and collimators. It is usually used in the fiber laser system to maintain the stability of optical system effectively.

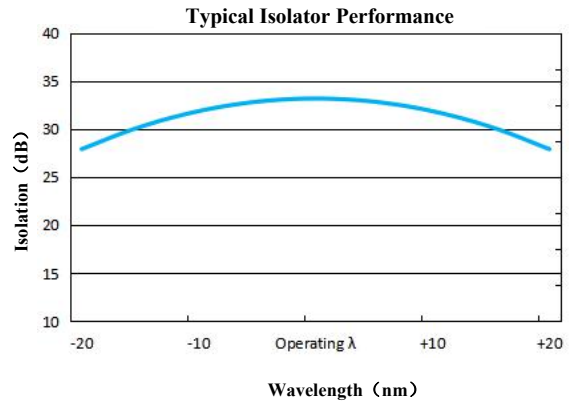
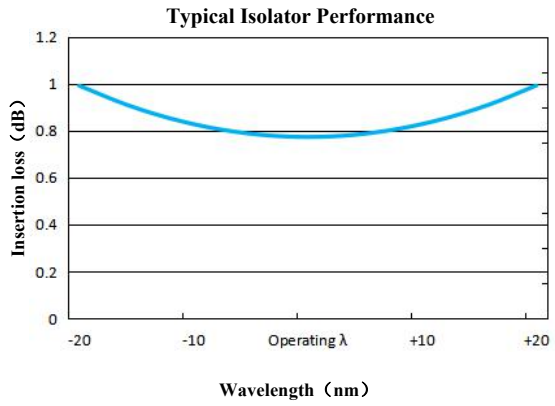
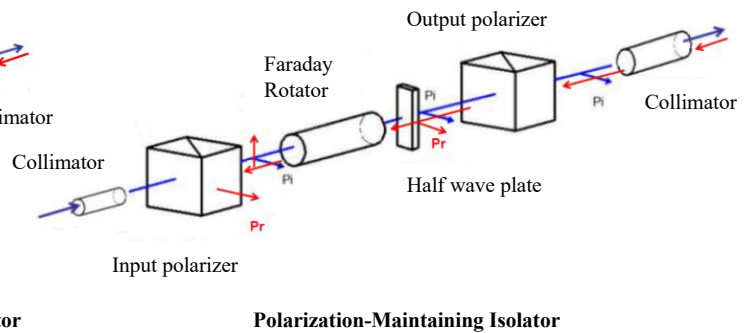
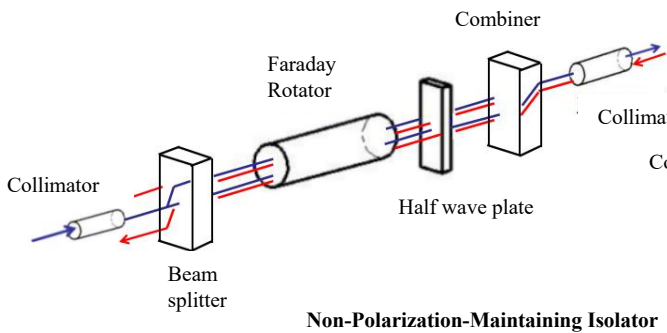
The polarization-maintaining type can achieve the steady transmittance of linear polarized light and remain the polarization state unchanged. It consists of input polarizer, Faraday rotator, half-wave plate or polarizer, output polarizer, and collimators. In applications, this type of isolator is used to maintain the stability of the system's polarization state.

CASTECH produces in-line isolators with high isolation, high power handling, high return loss, low insertion loss, excellent environmental stability and high reliability, operating in the wavelength range of 850~2000nm and power range of 0.3~500W. The connection types of the fiber tail can be bare fiber or FC/APC.



Applications

- EDFA
- DWDM Systems
- Optical coherence detection
- Laser sensing
- Fiber communication



In-Line Isolators

Non-Polarization-Maintaining Type Model Number: HPISO-t-p-f-λ-e-l-b-h

Type(t)	Power(p)	Fiber Type(f)	Wavelength (λ)	Pigtail Diameter(e)	Fiber Length(l)	Filter(b)	Housing(h)
IL (Common) ID (Dual Stage)	0.3 W	1 (HI1060)	980 nm 1030 nm 1064 nm 1940 nm ...	L (900 μm Loose Tube) B (3 mm Loose Tube)	1 (1 m) 2 (1.5 m) ...	C (Contained) N (Not contained)	A03
	5 W	2 (10/125SCF)					A08
	30 W	3 (20/130DCF)					A17
	50 W	4 (12/250DCF)					A31
	100 W	5 (20/250DCF)					...
	200 W	6 (30/250DCF)					...

Typical Specifications

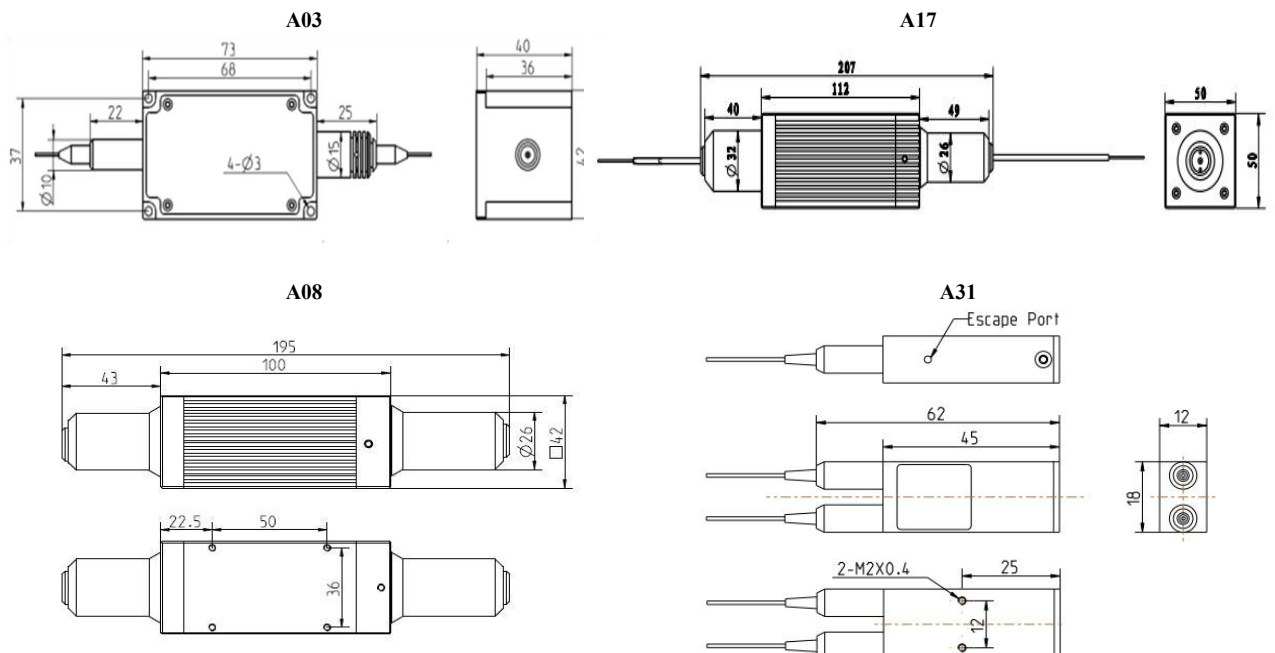
Withstand Power	Insertion Loss	Peak Isolation
5 W	<0.8 dB*, <1.0 dB**	>33 dB*, >50 dB**
30 W	<0.8 dB*, <1.0 dB**	>33 dB*, >50 dB**
100 W	<0.8 dB	>33 dB
500 W	<0.8 dB	>33 dB

Operating temperature range: 10°C-30°C.

* Only applicable to single-stage isolator

**Only applicable to dual-stage isolator

Housing dimensions(mm):



In-Line Isolators

Polarization-Maintaining Type Model Number: HPISO-t-p-f-λ-e-l-b-h

Type(t)	Power(p)	Fiber Type(f)	Wavelength (λ)	Pigtail Diameter(e)	Fiber Length(l)	Filter(b)	Housing (h)
IL (Common) ID (Dual Stage)	0.3 W 5 W 30 W 50 W 120 W 200 W 500 W ...	7 (PM 980) 8 (PM10/125SCF) 9 (PM20/130DCF) ...	980 nm 1030 nm 1064 nm 1940 nm ...	L (900 μm Loose Tube) B (3 mm Loose Tube)	1 (1 m) 2 (1.5 m) ...	C (Contained) N (Not contained)	A01 A25 ...

Typical Specifications

Withstand Power	Extinction Ratio	Insertion Loss	Peak Isolation
0.3 W	>20 dB	<1.0 dB	>33 dB
10 W	>20 dB	<1.0 dB*, <1.2 dB**	>33 dB*, >50 dB**
20 W	>20 dB	<1.0 dB*, <1.2 dB**	>33 dB*, >50 dB**
50 W	>20 dB	<1.0 dB	>33 dB

Operating temperature range: 10°C-30°C.

* Only applicable to single-stage isolator

**Only applicable to dual-stage isolator

Housing dimensions(mm):

