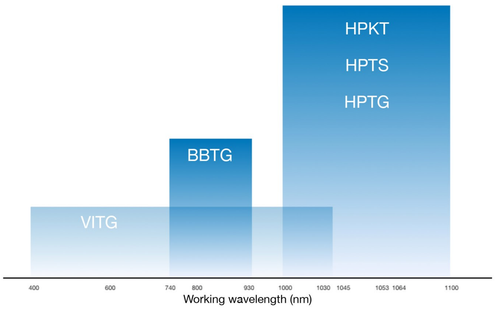
IPOptica
InPut Optica Technology, LLC.

Rotator & Isolator
Faraday Devices

IPOptica is always focusing on the future, to further develop technology and better satisfy broad applications, and always a better solution for most special demands of free space Rotators and Isolators by adjustable, broadband, and super large aperture available for most wavelength, at the same time with high performance and reliable. IPOptica's Faraday Devices have been designed to cover full wavelengths from 400 to 1100nm, while other wavelengths are available upon request.

IPOptica respect talents and their years experience from aesthetic combined engineering design, theoretical data simulations, precision machining, and quality control, and have been specifically designed to satisfy the demands of high power damage threshold, low absorption, low insertion loss and high isolation.

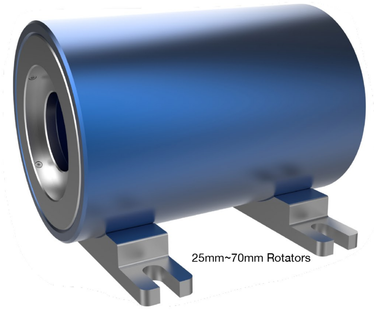


FEATURES

- High damage threshold and low insertion loss for high power application
- Low thermal lensing effect and thermal depolarization phenomena
- Orthogonal or Brewster isolated beams available upon request
- Tunable input polarization state
- Large aperture up to 70mm for 1000nm range
- Reliable quality and integrated design satisfy hostile operating environments

APPLICATIONS

- Protection of Pulsed and CW lasers against optical feedback
- Protection of seed sources by elimination of frequency instability
- Isolate ASE generated by amplifiers



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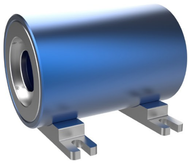


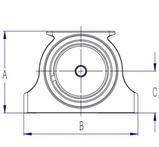
HPTG series Faraday Rotator & Isolator have been designed to provide the superior protection for solid state lasers and fiber lasers in 1000 - 1100nm range, The HPTG series support broad aperture range devices and tested up to 400W for CW power.

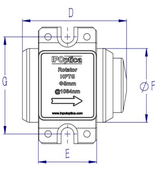
The high quality of HPTG series relay on our talents' years experience from aesthetic combined engineering design, theoretical data simulations, precision machining, and quality control, and have been specifically designed to satisfy the demands of high power damage threshold, low absorption, low insertion loss and high isolation.

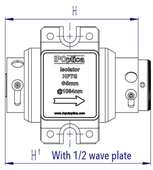
SPECIFICATIONS

MODEL	HPTG High Power 1030nm, 1045nm, 1053nm, 1064nm (1000-1100nm)	
Clear Aperture D	3.5mm/5mm, 8mm	10mm/12mm, 15mm, 20mm, 25mm, 30mm, 35mm, 45mm, 60mm, 70mm
Working Wavelength	1000 ~ 1090nm	
Rotation (Peak)	45° ± 0.5°	45° ± 1°
Damage Threshold	10J/cm² @ 10ns (MAX 15J/cm² on request) 1J/cm² @ 8ps (MAX 1.5J/cm² on request)	
Transmission Rate, %	>98% (Rotator) >96% (Isolator)	>98% (Rotator) >96% (Isolator)
Storage Temp Range	-40°C ~70°C	-10°C ~60°C
Tunable Temp Range	20°C ± 10°C / On request	
Peak Isolation	>33dB (Isolator)	
Isolated Beam Pointing	<5 mrad	On request

DIMENSIONS







	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)	G(mm)	H(mm)	H'(mm)
3.5/5mm	43	60	22.2	53.6	30	38	50	67.57	73.93
8mm	54.4	72	28.6	57.2	30	49.4	60	81.3	85.86
10/12mm	71.3	90	36.2	72	40	64.2	70	105.8	105.6
15mm	79.4	100	39.2	88.2	50	72.2	76	125.8	131.3
20mm	79.4	100	39.2	117.7	50	72.2	76	174.5	165.6
25mm	n/a	150	72	181	130	n/a	130	245.8	261
30mm	n/a	150	72	181	130	n/a	130	255.4	270
35mm	n/a	150	72	181	130	n/a	130	263.8	278.8
45mm	n/a	180	79	208	165	n/a	140	308.5	321
50~70mm	Up on request								