

1550

Faraday Rotators and Isolators - 1525 nm to 1575 nm

Our 1525 nm to 1575 nm Faraday devices rotate the plane of polarized light 45° in the forward direction and an additional 45° of non-reciprocal rotation in the reverse direction while maintaining the light's linear polarization. An optical isolator shields lasers from destabilizing and potentially destructive back-reflected light from interfaces on downstream optics or back-scattered ASE from optical amplifiers.

Based on high Verdet constant, low absorption coefficient rotating material, and developed to work with up to 20 W of average input power in the 1525 nm to 1575 nm wavelength range, our Faraday devices provide the ultimate protection for polarized lasers.



FEATURES

- Completely passive; no tuning required
- All isolators contain escape ports; all rejected beams are deflected at 90°

APPLICATIONS

- Mapping
- LIDAR
- Medical and Biosciences
- Chirped Pulsed Amplification (CPA)

OPTIONS

- Optional waveplate for manipulation of polarization
- Customization

Specifications	Rotator	Isolators ¹
Clear Aperture (mm)	4	4
Transmission at 22 °C (%)	>92	>92
Isolation at 22 °C (dB)	N/A	>30
Pulsed Damage Threshold (J/cm ²)	1 at 10 ns	1 at 10 ns
Power Handling (W)	20	20

Notes:

1. Escape ports should be used if rejected light is > 1 W or 0.15 J/cm² at 10 ns. All stray beams should be terminated.
2. Return loss-free working distance $\geq$ 25 mm for a collimated beam.

