

TORNOS Compact

Faraday Rotators and Isolators
633 nm to 1064 nm

The Coherent TORNOS Compact Faraday rotators and isolators are designed for wide-ranging end applications where optical feedback can adversely affect laser performance. The TORNOS Compact provides high transmission in the forward direction while strongly attenuating light traveling in the reverse direction, protecting lasers from the deleterious effects of back reflections.

Our TORNOS Compact devices deliver industry-best laser reliability and performance. The TORNOS Compact covers a variety of wavelengths in the NIR. A range of devices is available which allow for optimal isolation and transmission at specific wavelengths, depending on the model, and within the spectral bandwidth of the device. Our standard models are available at wavelengths common to many applications. We can also supply the TORNOS Compact optimized for non-standard wavelengths upon request.

Some common applications for the TORNOS Compact are the elimination of frequency instability in single frequency lasers such as laser diodes and OPSLs, the prevention of mode-hopping in external cavity diode lasers, and the elimination of parasitic oscillations due to ASE in amplified laser systems.

The TORNOS Compact isolators contain optically-contacted polarizing beam splitter cubes resulting in high transmission as compared to other available isolators. The TORNOS Compact's industry-leading high transmission results in more photons for your application. This allows diodes to be run at lower currents extending diode lifetime. The compact design makes it highly suitable for OEM integration.

Features

- High transmission
- Extends the life of your diode
- Compact design

Options

- Optional waveplate for manipulation of polarization
- Mounting Clamp Available
- Customization available

Applications

- Raman Spectroscopy
- DNA Sequencing
- Imaging
- Environmental Sensing
- Mapping
- Microscopy
- 3D Metrology
- Protecting pump lasers in amplified systems
- Cold Atom



AVAILABLE MODELS

Product	Wavelength
2 mm NIR Rotator	785
2 mm NIR Isolator	633 and 785
4 mm NIR Isolator	785
4 mm NIR+ Isolator	850
2 mm NIR+ Rotator and Isolator	1064

SPECIFICATIONS

Rotators					
Standard Wavelength (nm)	Spectral Range (nm)	Tunable Temperature (°C)	Transmission ¹ (%)	Forward Power Handling (W)	
785	780 to 790	10 to 30	≥98	5	
1064	1059 to 1069	10 to 30	≥98	5	
Isolators					
Standard Wavelength (nm)	Spectral Range (nm)	Tunable Temperature (°C)	Isolation ¹ (dB)	Transmission ¹ (%)	Forward Power Handling (W)
633	628 to 638	10 to 30	≥33	≥95	5
785	780 to 790	10 to 30	≥33	≥95	5
850	845 to 855	10 to 30	≥33	≥95	5
1064	1059 to 1069	10 to 30	≥33	≥95	5

¹ At specified wavelength and temperature.

NOTE: For non-standard wavelengths, contact EOT for more information



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Coherent follows a policy of continuous product improvement. Specifications are subject to change without notice. All products are RoHS compliant.

Coherent offers a limited warranty for all TORNOS Compact Rotators and Isolators. For full details of this warranty coverage, please refer to the Service section at www.coherent.com or contact your local Sales or Service Representative. Copyright ©1021 Coherent, Inc.