

Electro-Optics Technology, Inc.

TORNOS Compact Optical Isolators 405 nm to 1064 nm



EOT's TORNOS Compact optical isolators are designed for wideranging end applications where optical feedback can adversely affect laser performance. TORNOS Compact isolators provide 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 isolator solutions deliver industry-best laser reliability and performance. The TORNOS family of isolators covers a broad range of wavelengths - from the UV at 400 nm to the near-infrared at 1064 nm. A range of isolators is available which allow for optimal isolation and transmission at specific wavelengths, depending on the model, and within the spectral bandwidth of the isolator. 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.

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.

Innovative High Quality Laser Solutions

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



Innovative High Quality Laser Solutions

ModelProductWavelength RangeImage: State of the state of

^a 488 nm not available

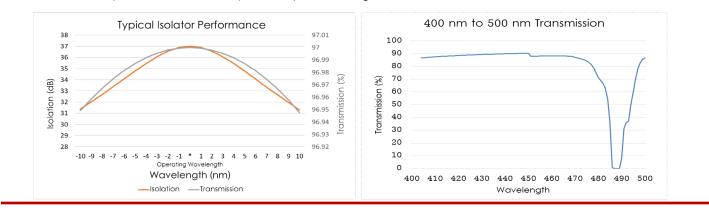
NOTE: Customer can specify any center wavelength that falls within the ranges outlined in the above chart.

| SPECIFICATIONS | | | | | |
|------------------------|--------------------|------------------------|------------------------|----------------------------------|---------------------------|
| Standard Wavelength | Spectral Range | Tunable Temperature | lsolation ^a | Transmission ^a | Forward Power Handling |
| 405 nm | 395 nm to 415 nm | 10 °C to 30 °C | >33 dB | >90% | 5 W |
| 532 nm | 522 nm to 542 nm | 10 °C to 30 °C | >33 dB | >95% | 5 W |
| 561 nm | 551 nm to 571 nm | 10 °C to 30 °C | >33 dB | >95% | 5 W |
| 638 nm | 628 nm to 648 nm | 10 °C to 30 °C | >33 dB | >95% | 5 W |
| 660 nm | 650 nm to 670 nm | 10 °C to 30 °C | >33 dB | >95% | 5 W |
| 730 nm | 720 nm to 740 nm | 10 °C to 30 °C | >33 dB | >95% | 5 W |
| 785 nm | 775 nm to 795 nm | 10 °C to 30 °C | >33 dB | >95% | 5 W |
| 920 nm | 910 nm to 930 nm | 10 °C to 30 °C | >33 dB | >95% | 5 W |
| 1064 nm | 1054 nm to 1074 nm | 10 °C to 30 °C | >33 dB | >95% | 5 W |

Product specifications are subject to change. All products are RoHS compliant.

^a At specified wavelength and temperature

NOTE: There is a decreased performance between the 400 nm and 500 nm wavelengths. Please see the below transmission curves. Spectral bandwidth is dependent upon wavelength. Contact EOT for more information.



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