4 mm PAVOS+
Faraday Rotators & Isolators
1010 nm to 1080 nm

Designed to meet the demanding performance required from today’s solid state lasers, the new 4 mm PAVOS+ is ideal for preventing feedback and back reflections.

The new 4 mm PAVOS+ isolator builds on the existing line of PAVOS isolators adding flexibility and performance at a competitive price.

**Improved Performance**
- Minimum isolation increases from 30 dB to 33 dB with typical isolation exceeding 37 dB
- Improved thermal lens due to shorter rotator material
- 2° tipped parallelogram PBS cubes for improved back reflection protection and perpendicular rejected beams

**Reduced Size**
- Less than 60 mm length is available

**FEATURES**
- Completely passive; no tuning required
- Stable performance to 80 W
- Optically contacted PBS cubes for improved damage threshold
- Input polarization adjustability

**OPTIONS**
- Optional waveplate on the output
- Precision mounting available
- Precision rejected beam pointing available
- Customization requests encouraged

**APPLICATIONS**
- Elimination of ASE in amplified systems, including CPA, MOPA, and regeneratively amplified mode-locked lasers
- Protecting lasers from back reflection caused by illuminating highly reflective materials
- Preventing frequency instability in seed lasers and other single frequency lasers

Improved Performance

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Reduced Size

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### SPECIFICATIONS

<table>
<thead>
<tr>
<th></th>
<th>PAVOS+ Rotators</th>
<th>PAVOS+ Isolators&lt;sup&gt;b&lt;/sup&gt;</th>
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<tbody>
<tr>
<td><strong>Clear Aperture</strong></td>
<td>4 mm</td>
<td>4 mm</td>
</tr>
<tr>
<td><strong>Peak Transmission</strong></td>
<td>≥98%&lt;sup&gt;c&lt;/sup&gt;</td>
<td>≥95%&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
<tr>
<td><strong>Peak Isolation</strong></td>
<td>N/A</td>
<td>≥33 dB&lt;sup&gt;c&lt;/sup&gt;</td>
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<tr>
<td><strong>Peak Extinction</strong></td>
<td>≥33 dB&lt;sup&gt;c&lt;/sup&gt;</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Peak Rotation</strong></td>
<td>45° ± 2.0°</td>
<td>45° ± 1.5°</td>
</tr>
<tr>
<td><strong>Damage Threshold</strong>&lt;sup&gt;c&lt;/sup&gt;</td>
<td>10 J/cm&lt;sup&gt;2&lt;/sup&gt; at 10 ns</td>
<td>10 J/cm&lt;sup&gt;2&lt;/sup&gt; at 10 ns</td>
</tr>
<tr>
<td></td>
<td>1 J/cm&lt;sup&gt;2&lt;/sup&gt; at 8 ps</td>
<td>1 J/cm&lt;sup&gt;2&lt;/sup&gt; at 8 ps</td>
</tr>
<tr>
<td></td>
<td>1 MW/cm&lt;sup&gt;2&lt;/sup&gt; CW</td>
<td>1 MW/cm&lt;sup&gt;2&lt;/sup&gt; CW</td>
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<tr>
<td><strong>Storage Temperature Range</strong></td>
<td>-20 °C to 60 °C</td>
<td>-20 °C to 60 °C</td>
</tr>
<tr>
<td><strong>Factory Tunable Temperature Range</strong></td>
<td>10 °C to 28 °C&lt;sup&gt;d&lt;/sup&gt;</td>
<td>10 °C to 28 °C&lt;sup&gt;d&lt;/sup&gt;</td>
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</table>

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

<sup>a</sup> See technical bulletin, *Advantages of the PAVOS Product Line*

<sup>b</sup> Escape ports should be used if rejected light is >1 W or 0.15 J/cm<sup>2</sup> at 10 ns or forward light is >25 W. All stray beams should be properly terminated.

<sup>c</sup> At customer-specified wavelength and temperature

<sup>d</sup> Tunable Temperature Range applies to wavelengths 1010 nm to 1064 nm. >1064 nm is 22 °C.

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**Isolator Performance**

![Graph of Isolator Performance](image)

**Isolator Performance**

![Graph of Isolator Performance](image)

For questions or quotations please email or call our sales representatives at SALES@EOTECH.COM or +1.231.935.4044.