PRISMS

Your One-Stop Source for Prisms

From prototype to production, Rainbow Research Optics, Inc (RROI) manufactures and coats prisms.

✓ In-house grinding, polishing, activated bonding, machining, and coating
✓ Low distortion (down to λ/10 @ 633 nm) and beam deviation tolerances (arc sec range)
✓ Thin film engineering and optical assemblies


STANDARD PRISMS

Customization is available beyond what’s listed. Contact us (https://www.rr-optics.com/contact-page/) with your requirements.

RIGHT ANGLE PRISMS (part code: RAP)

Substrate: SUPRASIL 1, UV Fused Silica, BK7, or SF2
Dimension Tolerance: +0.0/-0.20 mm
Angular Deviation: < 3 arc min.
Clear Aperture: > 85% of central circular dimension
Edge Bevel: 0.3 mm face width at 45°

RIGHT ANGLE BENDING PRISMS (part code: BRP)

Substrate: SUPRASIL 1, UV Fused Silica, BK7, or SF2
Dimension Tolerance: +0.0/-0.20 mm
Angular Deviation: < 3 arc min.
S1 and S2 AR Coating: Single Wavelength AR R < 0.25%,
Broadband AR Ravg < 0.50%

**Clear Aperture**: > 85% of central circular dimension

**Edge Bevel**: 0.3 mm face width at 45°

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**Right Angle Folding Prisms**

(part code: FRP)

**Substrate**: UV Fused Silica or BK7  
**Dimension Tolerance**: +0.0/-0.20 mm  
**Angular Deviation**: < 3 arc min.  

**S1 and S2 AR Coating**: Single Wavelength AR R < 0.25%,  
Broadband AR Ravg < 0.50%  
**Clear Aperture**: > 85% of central circular dimension  
**Edge Bevel**: 0.3 mm face width at 45°

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**Isosceles Brewster Prisms**

(part code: IBP)

**Substrate**: SUPRASIL 1, UV Fused Silica, or SF10  
**Dimension Tolerance**: +0.0/-0.20 mm  
**Angular Deviation**: < 10 arc min.  
**Surface Figure**: λ/10 @ 633 nm  
**Surface Quality**: 10-5 (SUPRASIL 1 and UV Fused Silica), 20-10 (SF10)  
**Clear Aperture**: > 85% of central circular dimension  
**Edge Bevel**: 0.3 mm face width at 45°

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**Rhomboid Prisms**

(part code: RBP)

**Substrate**: UV Fused Silica or BK7  
**Dimension Tolerance**: +0.0/-0.20 mm  
**Angular Deviation**: < 3 arc min.  
**Surface Figure**: λ/10 @ 633 nm  
**Clear Aperture**: > 85% of central circular dimension  
**Edge Bevel**: 0.3 mm face width at 45°
**Equilateral Dispersing Prisms**
(part code: EDP)

Substrate: UV Fused Silica or BK7  
Dimension Tolerance: +0.0/-0.20 mm  
Angular Deviation: < 3 arc min.  
Surface Figure: \( \lambda/8 @ 633 \) nm  
Clear Aperture: > 85% of central circular dimension  
Edge Bevel: 0.3 mm face width at 45°

**Porro Prisms**
(part code: PRP)

Substrate: UV Fused Silica, BK7, or SF2  
Dimension Tolerance: +0.0/-0.20 mm  
Angular Deviation: \( \leq 10 \) arc min.  
Surface Figure: \( \lambda/10 @ 633 \) nm  
Clear Aperture: > 85% of central circular dimension  
Edge Bevel: 0.3 mm face width at 45°

**Littrow Prisms**
(part code: LOP)

Substrate: UV Fused Silica  
Dimension Tolerance: +0.0/-0.20 mm  
Angular Deviation: \( \leq 10 \) arc min.  
Surface Figure: \( \lambda/10 @ 633 \) nm  
Clear Aperture: > 85% of central circular dimension  
Edge Bevel: 0.3 mm face width at 45°
Penta Prisms (part code: PTP)

Substrate: BK7
Dimension Tolerance: +0.0/-0.20 mm
Angular Deviation: ≤ 10 arc min.
Surface Figure: λ/4 @ 633 nm
Clear Aperture: > 85% of central circular dimension
Edge Bevel: 0.3 mm face width at 45°

Corner Cube Prisms (part code: CCP)

Substrate: BK7A
Dimension Tolerance: +0.0/-0.20 mm
Beam Deviation: 180° Â± 2, 5, or 10 arc sec.
Surface Figure: λ/8 @ 633 nm
Surface Quality: 40-20
Clear Aperture: > 85% of central circular dimension
Edge Bevel: 0.3 mm face width at 45°

Dove Prisms (part code: DOP)

Substrate: UV Fused Silica or BK7
Dimension Tolerance: +0.0/-0.20 mm
Angular Deviation: ≤ arc min.
Surface Figure: λ/4 @ 633 nm
Clear Aperture: > 85% of central circular dimension
Edge Bevel: 0.3 mm face width at 45°
**GET A FREE QUOTE TODAY**

Send us your requirements below and we will respond quickly.

**YOUR INFO.**

Name* | Company
---|---

Phone | E-mail*
---|---

**PRODUCT DETAILS**

Fill in fields if applicable.

<table>
<thead>
<tr>
<th>Part Name or Part Code*</th>
<th>Material*</th>
<th>Quantity*</th>
<th>Delivery Time</th>
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Diameter | Thickness | Length
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Width | S1 Radius | Parallelism or Wedge | Flatness/Irregularity @633nm
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Surface Quality (Scratch/Dig)

Coating Requirements

**QUESTIONS & COMMENTS**

Any additional product details or questions?
Rainbow Research Optics, Inc (RROI) is ISO 9001:2015 Certified and ITAR Registered

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