

If you need one of our prisms as soon as possible - just ask for next-day delivery. We try very hard to keep standard prisms in stock for immediate shipment — so you won't find yourself caught short trying to finish a project. We also have a wide range of special prism sizes and shapes available.

Right Angle and Knife Edge Prisms

We offer these prisms uncoated or with five different coating options, namely:

- **Broadband Multilayer Anti-Reflection** coating on legs
- **Protected Aluminum** on hypotenuse and **Broadband Multilayer Anti-Reflection** on legs
- **Protected Aluminum** on hypotenuse
- **Protected Aluminum** on legs
- **Broadband Multilayer Anti-Reflection** coating on hypotenuse

These are some of the most versatile prisms available. They can be used as internal or external reflectors or as retro-reflectors according to the orientation of the prism with respect to the incoming light. An uncoated prism will act as a mirror for light incident on one of the short sides (legs) since incident light is totally internally reflected at the hypotenuse. (TIR occurs when the angle of incidence is greater than the critical angle which for the glass-air interface occurs at 41.2 degrees). Even though uncoated prisms work well their useful full field of view is limited to 10 or 12 degrees in the visible. It is recommended that appropriate coatings be added to optimize the range of prism uses.

The Broadband Multilayer Anti-Reflection coating will withstand high power laser use, while the Protected Aluminum coating is evaporated aluminum overcoated with a layer of MgF_2 to protect it from scratches and abrasions. See page 16 for the Broadband AR transmission curve and page 27 for the Protected Aluminum reflectivity curve.



Specifications & Tolerances

Dimensions: +0, -0.15mm

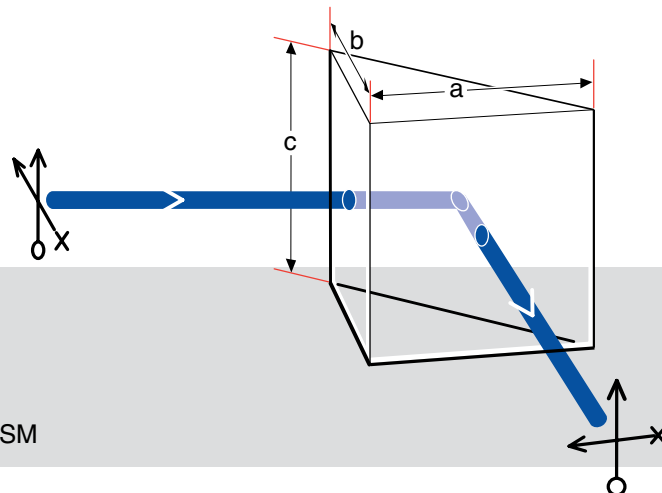
Surface flatness: $\lambda/4$

Surface quality: 40-20 (Coated)
20-10 (Uncoated)

Angular deviation: ± 1 arcmin

Bevel: 0.2 to 0.3mm typical

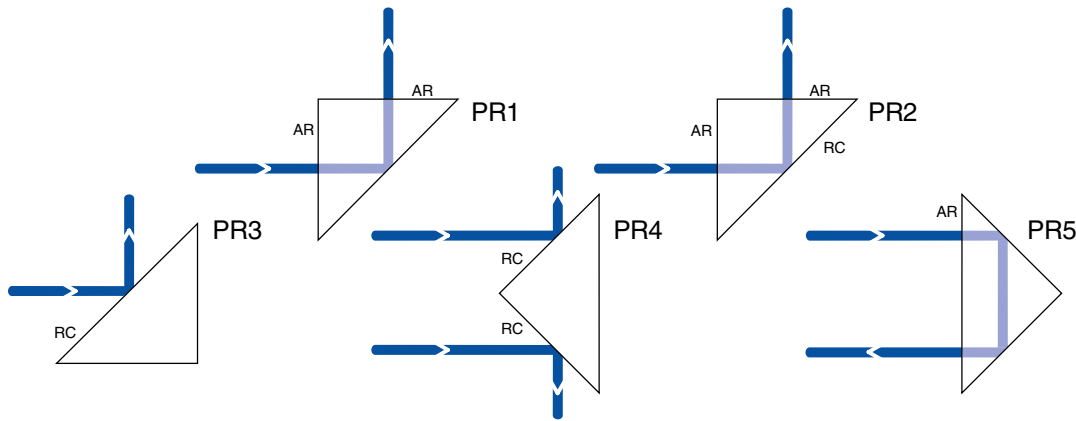
Material: BK7, grade A or fused silica



RIGHT ANGLE PRISM

ORDERING
&
TECHNICAL SUPPORT
(949) 851-5881
FAX (949) 851-5058
E-MAIL
sales@optosigma.com
WEB
www.optosigma.com





PRISM COATING OPTIONS

Right Angle Prisms

Material	Sides a=b=c (inch)	Sides a=b=c (mm)	Price	PART NUMBER
BK7	0.20	5.0		055-0110
	0.25	6.4		055-0115
	0.28	7.0		055-0117
	0.39	10.0		055-0120
	0.50	12.7		055-0125
	0.59	15.0		055-0130
	0.75	19.1		055-0135
	0.79	20.0		055-0140
	0.98	25.0		055-0150
	1.00	25.4		055-0155
	1.18	30.0		055-0160
	1.50	38.1		055-0162
	2.00	50.8		055-0165
Fused Silica	0.39	10.0		055-0190
	0.50	12.7		055-0193
	0.59	15.0		055-0195
	0.79	20.0		055-0197
	0.98	25.0		055-0200
	1.00	25.4		055-0203
	1.18	30.0		055-0205
Knife Edge BK7	0.39	10.0		055-0280
	0.59	15.0		055-0290
	0.79	20.0		055-0300

We try to keep all coating options in stock but please allow 2 weeks for coating if we do not have the option of your choice. Prisms are supplied uncoated unless coating suffix is appended. Suffix may be added to all right angle prisms above except knife edge. Call for coating price on knife edge prisms.

For **Broadband Multilayer AR** on legs **append -PR1** and add \$40.

For **Protected Aluminum** on hypotenuse and BMAR on legs **append -PR2** and add \$52.

For **Protected Aluminum** on hypotenuse **append -PR3** and add \$25.

For **Protected Aluminum** on legs **append -PR4** and add \$40.

For **Broadband Multilayer AR** on hypotenuse **append -PR5** and add \$20.

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