

POLARIZING CUBES

Description

Polarizing cubes for specified wavelength (250-2200 nm) AR coated on four input and output working surfaces. Polarizing beamsplitter cubes split randomly polarized beams into two orthogonal, linearly polarized components: s polarized light is reflected at a 90° angle while p-polarized light is transmitted.

Polarizing cubes for medium power applications

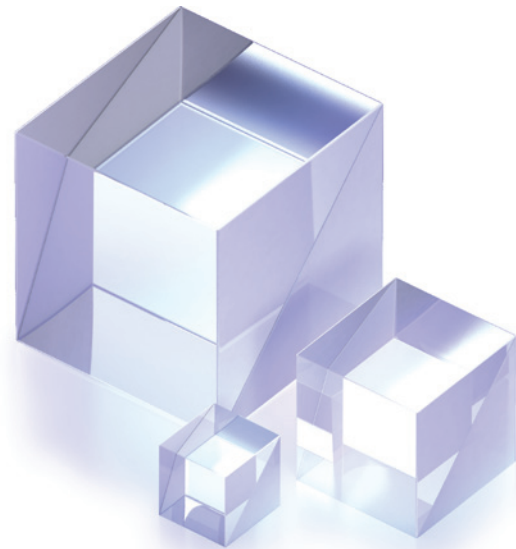
Each beamsplitter consists of a pair of high precision right angle prisms cemented together with a dielectric coating on the hypotenuse of one of the prisms. Typical damage threshold of these cubes is $>0,3 \text{ J/cm}^2 @ 1064 \text{ nm } 10 \text{ ns}$ at 20 Hz.

Polarizing cubes for high power applications

OPTICALLY CONTACTED polarizing beamsplitter cubes used for HIGH POWER applications can withstand energy fluencies up to $20 \text{ J/cm}^2 @ 1064 \text{ nm}$ for 10 ns pulses at 20 Hz.

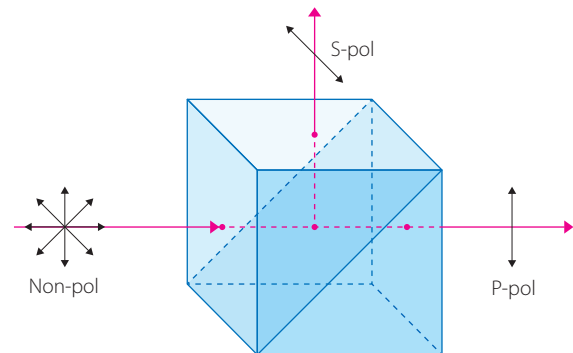
Standard specifications

Material	BK7, UVFS, SF glasses
Dimensions tolerance	+0/-0.2 mm
Clear aperture	>90 %
Surface quality	40-20 S-D
Surface flatness	$<\lambda/4 @ 632.8 \text{ nm}$
Beam deviation	$<3 \text{ arcmin}$
Laser induced damage threshold	$>0.3 \text{ J/cm}^2$ for 10 ns pulses @ 1064 nm for cemented cubes $>5 \text{ J/cm}^2$ for 10 ns pulses @ 1064 nm for optically contacted cubes



Features

- Optimized for popular laser wavelengths
- Dual wavelength polarizing cubes are also available
- All polarizing cubes are AR coated
- Many Polarizing cubes are available from stock with fast delivery!



Catalog Items

Wave-length, nm	Dimensions, mm	Reflection s-pol. %	Transmission p-pol. %	Product ID
400	12.7 x 12.7 x 12.7	>99	>90	2-PCB-B-0125
	25.4 x 25.4 x 25.4			2-PCB-B-0200
450-650	12.7 x 12.7 x 12.7	>99.5	>95	2-PCB-C-0125
	25.4 x 25.4 x 25.4			2-PCB-C-0200
532	12.7 x 12.7 x 12.7	>99.8	>97	2-PCB-D-0125
	25.4 x 25.4 x 25.4			2-PCB-D-0200
633	12.7 x 12.7 x 12.7	>99.8	>97	2-PCB-E-0125
	25.4 x 25.4 x 25.4			2-PCB-E-0200
700-900	12.7 x 12.7 x 12.7	>99.5	>95	2-PCB-F-0125
	15 x 15 x 15			2-PCB-F-0150
780	25.4 x 25.4 x 25.4	>99.8	>97	2-PCB-F-0200
	12.7 x 12.7 x 12.7			2-PCB-G-0125
850	25.4 x 25.4 x 25.4	>99.8	>97	2-PCB-G-0200
	12.7 x 12.7 x 12.7			2-PCB-H-0125
1020-1100	25.4 x 25.4 x 25.4	>99.5	>97	2-PCB-H-0200
	12.7 x 12.7 x 12.7			2-PCB-J-0125
1064	25.4 x 25.4 x 25.4	>99.5	>97	2-PCB-J-0200
	12.7 x 12.7 x 12.7			2-PCB-K-0125
1310	25.4 x 25.4 x 25.4	>99.8	>97	2-PCB-K-0200
	12.7 x 12.7 x 12.7			2-PCB-L-0125
1550	25.4 x 25.4 x 25.4	>99.8	>97	2-PCB-L-0200
	12.7 x 12.7 x 12.7			2-PCB-M-0125
	25.4 x 25.4 x 25.4			2-PCB-M-0200

OPTICALLY CONTACTED polarizing cubes for high power applications

Wavelength, nm	Dimensions, mm	Reflection s-pol, %	Transmission p-pol, %	Product ID
345-365 (centered @ 355 nm)	12.7 x 12.7 x 12.7	>99.5	>97	2-HPCB-A-0125
510-550 (centered @ 532 nm)				2-HPCB-B-0125
1020-1090 (centered @ 1064 nm)				2-HPCB-C-0125
1510-1580 (centered @ 1550 nm)				2-HPCB-D-0125

* Contact ALTECHNA for larger quantity pricing info@altechna.com

If you do not find suitable size substrate for your application please contact us and we guaranty to provide a solution for you

Related products and accessories

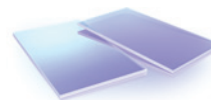
- Crystalline Quartz Waveplates (page 101)



- HR Laser Line Mirrors (HR) (page 52)



- High Contrast Thin Film Polarizers (page 116)



- Standard Watt Pilot - Attenuator (page 188)



- 6PT169 - Three Angle Prism / Beamsplitter Table (page 260)

