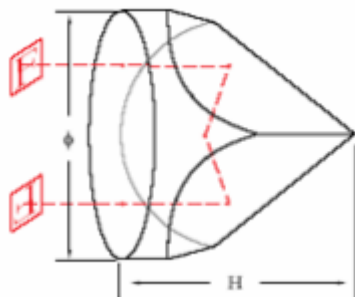


Corner Cube Retroreflector Prism

Product description:



Schematic drawing

Corner cube retro-reflectors reflect an image or beam back toward its original direction via three total internal reflections (TIR). The beam or image will be inverted and reflected through 180° even if the angle of incidence is not zero. The insensitivity of the alignment of these prisms make them ideal retroreflecting optics. For these retroreflecting prisms, the incident and reflected beams will be parallel to within 3 arcsec. However, unless the incident and reflected beams strike the exact center of the optic, they will not overlap but rather be shifted with respect to each other. For example, if the incident beam strikes the optic 3 mm to the right of center, the retroreflected beam will emerge 3 mm to the left of center.

Retroreflectors manufactured by Photonchina have three mutually perpendicular surfaces and a hypotenuse face. A beam goes into the hypotenuse surface reflected by each of the three surfaces in turn, and goes out from the hypotenuse surface parallel to the entering beam. It is able to retro-reflect over a wide range of incident angles, useful in applications where precise alignment is difficult to achieve, or where vibration is present.

As a professional supplier of corner cube prisms in China, we offer uncoated retroreflectors as well as versions with antireflection (AR) coatings in one of three ranges: 350 - 700 nm, 650 - 1050 nm, or 1050 - 1700 nm. Sizes are able to choose from Diameter options of 10mm, 12.7mm, 25.4mm to 50mm.

Customized sizes and coating requirement is also available.

Photonchina Specifications

Material:	N-BK7/N-SF11 or other glass materials
Design wavelength	633nm
AR coating	Ravg<0.5% AOI=0deg
Dimensional Tolerance:	+0.0/-0.1mm
Beam deviation	<3 arc seconds
Flatness:	$\lambda / 4 @ 632.8\text{nm}$
Surface Quality:	20-10
Clear Aperture:	>90%
Bevel:	<0.2mm X 45°