

# MPS002 Monitoring Prism for Road Monitoring Surveying Prism Reflector Prism:

The prism offset is dependent on the mounting, measurement range within 2km

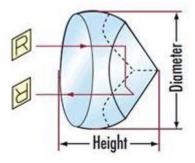
A corner cube prism has three mutually perpendicular surfaces and a hypotenuse face.

Light entering through the corner cube prism's hypotenuse is reflected by each of the three surfaces in turn and will emerge through the hypotenuse face parallel to the entering beam regardless of the orientation of the incident beam.

For corner cube prism's special performance, it is often used to the distance measurement, optical signal process and laser.

#### Uses:

- 3-dimensional monitoring of bridges.
- Simple and quick measurement and monitoring of buildings, facades, supporting structures, pillars, high rack storage facilities, dams and much more.
- For monitoring formwork during the concrete work, e.g. in
- the case of bridge arches and single-faced wall formworks.
- For monitoring earth and rock movements e.g. up steep ascents or along cliffs.
- For monitoring railway tracks where there is surrounding building work (bridge and tunnel construction, pressure grouting of railway lines etc.)



#### **High Precision Corner Cube Prism specifications:**

Material	BK7 Grade A
Diameter	12.7mm
Height	10.16mm
Dimension Tolerance	+0.0, -0.1mm

Clear Aperture	>85% of diameter
Surface Quality	40-20 scratch and dig
Flatness	λ/8 at 632.8nm
Deviation	±3 arc seconds
Bevel	0.25mmx45deg
Coating	Upon requirement

## **Standard Corner Cube Prism specifications:**

Material	BK7 Grade A
Diameter	12.7mm
Height	10.16mm
Dimension Tolerance	+0.0, -0.2mm
Clear Aperture	>80% of diameter
Surface Quality	60-40 scratch and dig
Flatness	λ/4 at 632.8nm
Deviation	±3 arc min
Bevel	0.25mmx45deg
Coating	Upon requirement

- Range: 200m + by the majority of current total stations.
- Tested temperature rating of -112°F to +212°F
- Diameter: 12.7mm with a tolerance of +/- 0.2 mm
- Height of the 12.7 mm prism: 9.525 mm with a tolerance of +/- 0.2 mm
- Accuracy is 5 arc sec with a tolerance of +/-2 arc sec.

Offset: 10mmConstant: ZERO

### **Corner Cube Prism AR coating curve:**

