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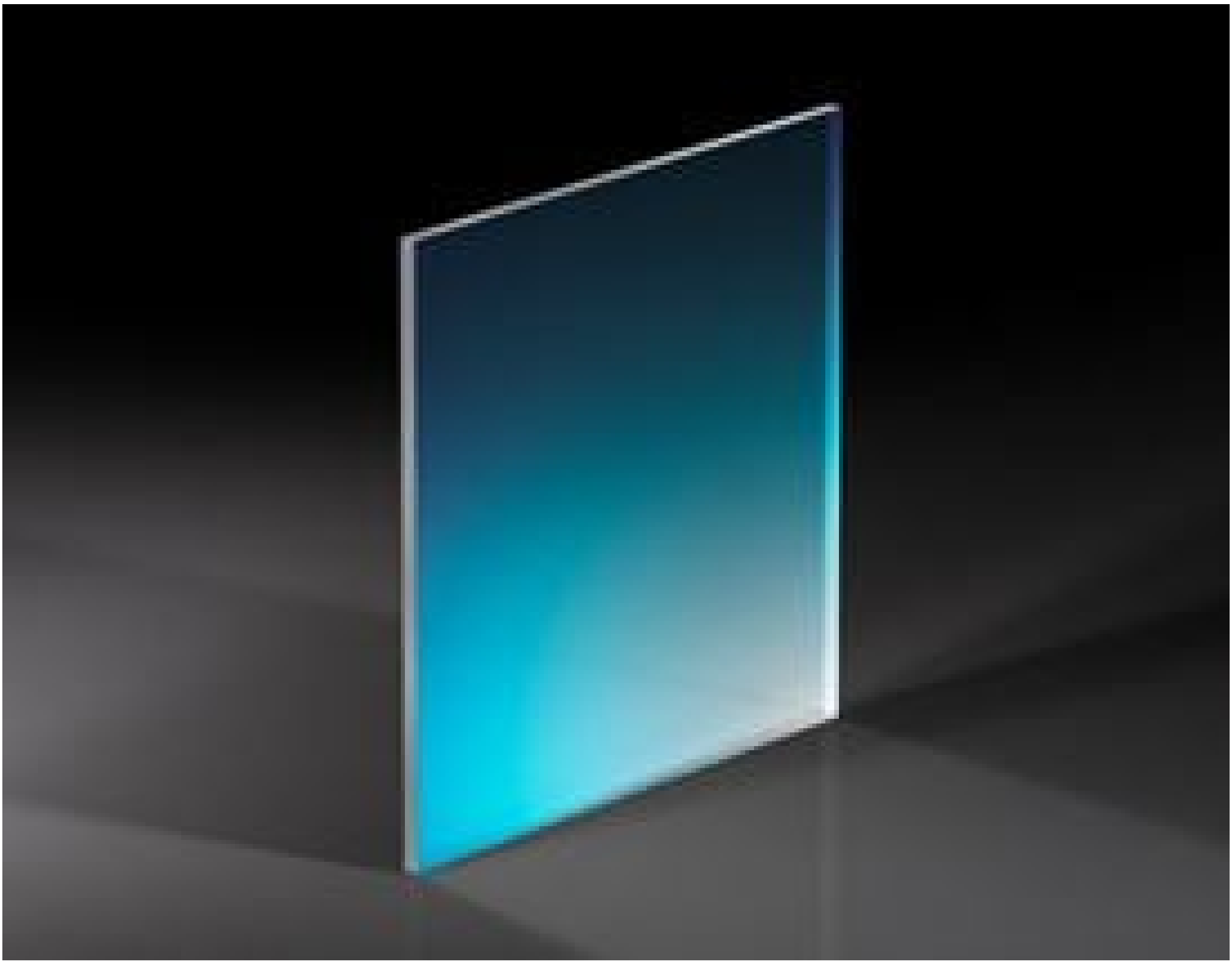
12.7mm Sq 80R/20T, UV-NIR Polka-Dot Beamsplitter



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Qty 1-10	**A$268.80** each
Qty 11-25	**A$224.00** each
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General

Type:
Standard Beamsplitter

Physical & Mechanical Properties

Center to Center Spacing (mm):
0.15

Clear Aperture (%):
90

Construction:
Polka-Dot

Dimensional Tolerance (mm):
+0.0/-0.5

Dimensions (mm):
12.7 x 12.7

Parallelism (arcmin):
<3

Thickness (mm):
1.50 ±0.1

Optical Properties

Angle of Incidence (°):
0 - 45

Coating:
Square Aluminum ($AlMgF_2$) Apertures

Minimum Aperture (mm):
2.00

Reflection/Transmission Ratio (R/T):
80/20

Reflection/Transmission Tolerance (%):
±5 @ 45°

Substrate:
Fused Silica (Corning 7980)

Surface Quality:
80-50

Wavelength Range (nm):
250 - 2000

Environmental & Durability Factors

Operating Temperature (°C):
150 Maximum

Regulatory Compliance

RoHS 2015:
Compliant

Certificate of Conformance:
View

Reach 247:
Compliant

Need different specs or modifications?

Edmund Optics offers comprehensive custom manufacturing services for optical and imaging components tailored to your specific application requirements. Whether in the prototyping phase or preparing for full-scale production, we provide flexible solutions to meet your needs. Our experienced engineers are here to assist—from concept to completion.

Our capabilities include:

- Custom dimensions, materials, coatings, and more
- High-precision surface quality and flatness
- Tight tolerances and complex geometries
- Scalable production—from prototype to volume

Learn more about our custom manufacturing capabilities or submit an inquiry here.

Product Details

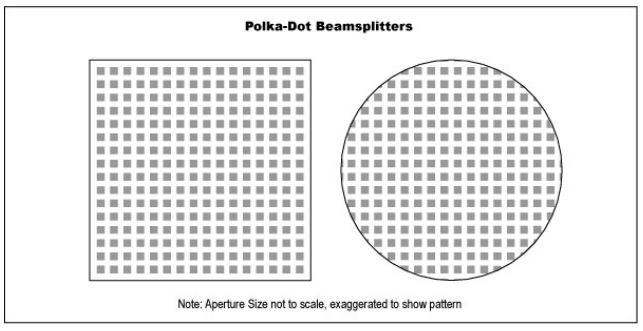
- Various Beamsplitting Ratios Available
- Insensitive to Angle of Incidence Changes
- VIS-NIR Versions Available

UV-NIR Polka-Dot Beamsplitters feature a constant reflection/transmission ratio over a large spectral range. A vacuum deposited enhanced aluminum coating on fused silica substrates with fixed square apertures guarantees 30/70, 50/50, or 70/30 reflection/transmission ratios from 250 to 2000nm. Incident light is reflected by the coated area and is transmitted through the surrounding uncoated substrate. Since UV-NIR Polka-Dot Beamsplitters are not angle sensitive, they are ideal for splitting energy from a radiant light source with a beam diameter of at least 2mm. These beamsplitters are especially useful with broadband, extended sources, such as tungsten, halogen, deuterium, and xenon lamps, and for use in monochromators, spectrophotometers, and other optical systems.

Note: The surface of these beamsplitters is very sensitive and should never be touched when handling the optic. If cleaning is required to remove dust particles, non-contact cleaning using clean compressed air is recommended.

Polka-Dot Beamsplitters offer no significant divergence from diffraction, nor are there performance issues with polarized sources. These beamsplitters are ideal for use with broadband, extended sources, such as tungsten, halogen, deuterium, and xenon lamps, and for use in monochromators, spectrophotometers, and other optical systems.

Technical Information



Special Handling

These optics require special handling to avoid damage and ensure long-term performance. Proper handling, cleaning, and storage are essential to maintain optical quality. Explore our **Optics Cleaning Resources** for step-by-step guides and best practices. For personalized assistance, **Email us** or **Chat** with our technical support team.

Component Handling Tools

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