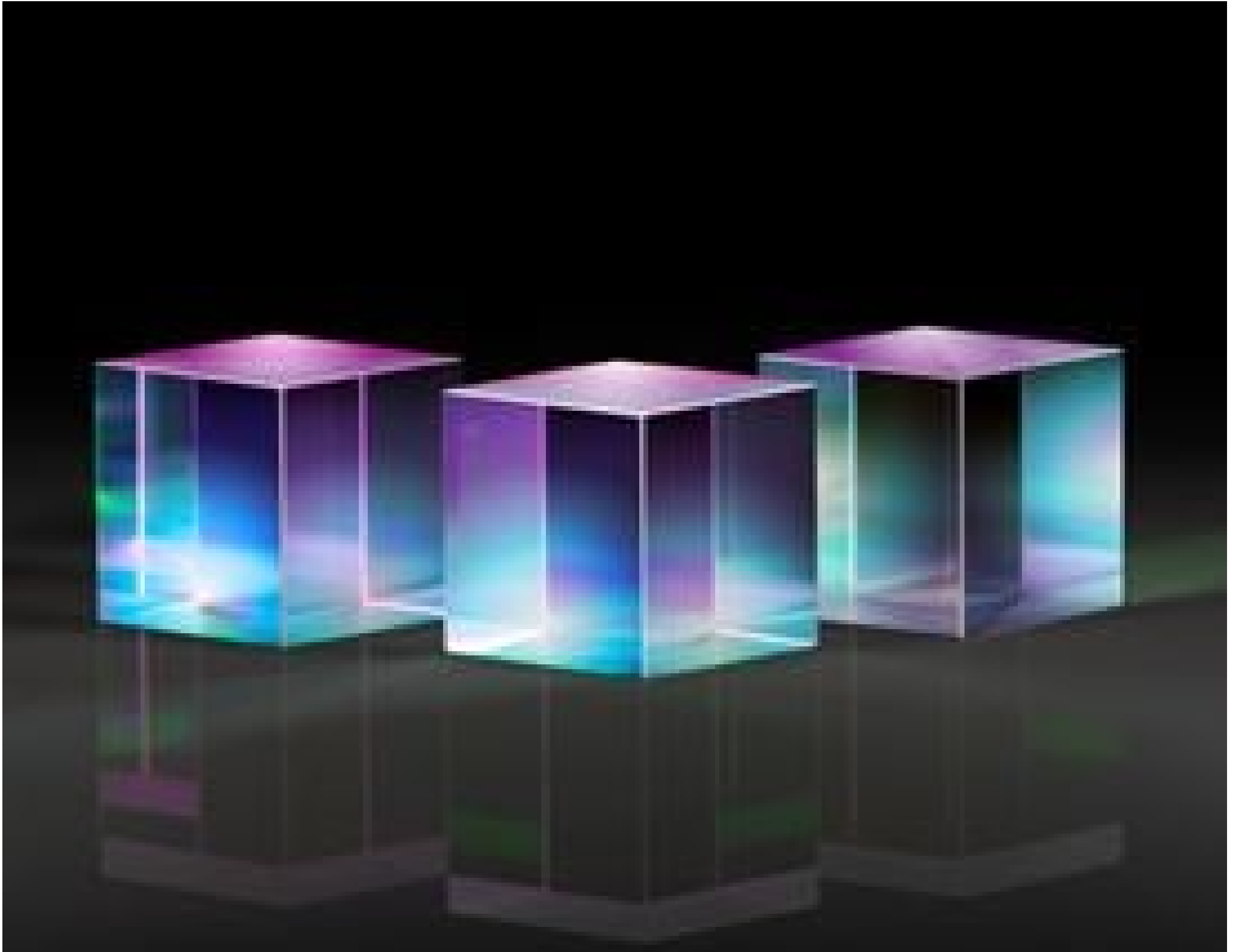


## 12.7mm 689nm, Polarizing Cube Beamsplitter



Stock #72-219 **1 In Stock**

⊖ 1 ⊕ £432.<sup>00</sup>

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Volume Pricing	
Qty 1-4	£432.00 each
Qty 5+	£366.40 each
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ⓘ Prices shown are exclusive of VAT/local taxes

### Product Downloads

### General

Linear Polarizer

Type:

### Physical & Mechanical Properties

Protective as needed

Bevel:

>90

Clear Aperture CA (mm):

Cube **Construction:**

12.7 x 12.7 x 12.7 +0.0/-0.3 **Dimensions (mm):**

## Optical Properties

<3 **Beam Deviation (arcmin):**

689 **Design Wavelength DWL (nm):**

>1000:1 **Extinction Ratio:**

>96 **P-Polarization Transmission (%):**

>99.5 **S-Polarization Reflection (%):**

Fused Silica **Substrate:**

$\lambda/6$  @ 632.8nm **Surface Flatness (P-V):**

20-10 **Surface Quality:**

679 - 698 **Wavelength Range (nm):**

## Regulatory Compliance

[Compliant](#) **RoHS 2015:**

[View](#) **Certificate of Conformance:**

[Compliant](#) **Reach 247:**

## Product Details

- Ideal for Trapped-Ion and Neutral Atom Applications
- Range of Application-Specific Wavelengths from 366nm to 815nm
- Surface Quality of 20-10 to Reduce Loss with Low-Light Signals

Polarizing Cube Beamsplitters for Quantum Computing are ideal for use in trapped ion, linear optical, and neutral atom quantum computing and quantum cryptography and communication applications. These beamsplitters are available in a range of commonly used, application-specific wavelengths across the UV to NIR spectrum covering the main wavelengths of commonly used ions (Ytterbium/Strontium/Calcium) energy levels to provide Rydberg excitation, Doppler cooling and other operations such as Raman effects, trapping of ions and others.

They offer a >99.5% reflection of S-Polarized light and >96% transmission of P-Polarized light. Featuring a compact 12.7mm cube construction, these beamsplitters can be easily integrated into benchtop applications or OEM devices and help to save space in the system. Polarizing Cube Beamsplitters for Quantum Computing feature a fused silica substrate, offering low temperature sensitivity, and are AR-coated for maximum transmission at the design wavelength to ensure optimal performance with low light signals. These beamsplitters feature precision right angle prisms to ensure  $\lambda/6$  surface flatness and a surface quality of 20-10. Half Waveplates for Quantum Computing are also available, and custom wavelengths are available for both.