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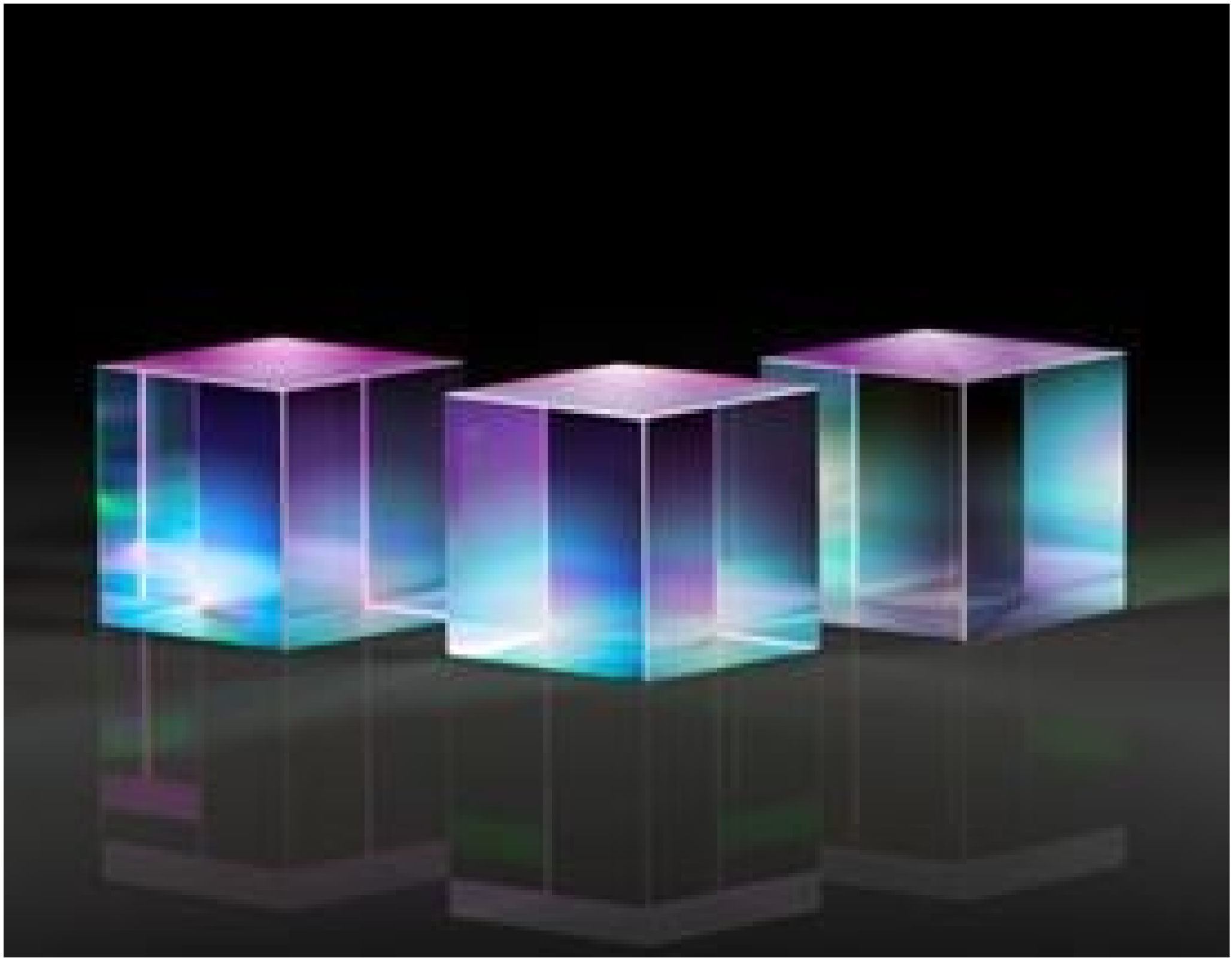
12.7mm 689nm, Polarizing Cube Beamsplitter



Stock **#72-219** **3 In Stock**

- 1 + **€540**.00

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Volume Pricing	
Qty 1-4	**€540,00** each
Qty 5+	**€458,00** each
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Product Downloads

General

Type:

Linear Polarizer

Physical & Mechanical Properties

Bevel:

Protective as needed

Clear Aperture CA (mm):

>90

Construction:
Cube

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

Optical Properties

Beam Deviation (arcmin):
<3

Design Wavelength DWL (nm):
689

Extinction Ratio:
>1000:1

P-Polarization Transmission (%):
>96

S-Polarization Reflection (%):
>99.5

Substrate:
Fused Silica

Surface Flatness (P-V):
λ/6 @ 632.8nm

Surface Quality:
20-10

Wavelength Range (nm):
679 - 698

Regulatory Compliance

RoHS 2015:
Compliant

Certificate of Conformance:
View

Reach 247:
Compliant

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 λ/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.

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