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12.7mm Dia. 813nm λ/2 Quartz Waveplate

Stock **#71-040** **1 In Stock**

- 1 + **£384**.80

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Volume Pricing	
Qty 1-5	**£384.80** each
Qty 6+	**£268.00** each
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Product Downloads

General

Type:

Crystalline Waveplate

Physical & Mechanical Properties

Clear Aperture CA (mm):

>8.00

Diameter (mm):

12.70 +0.0/-0.2

Optical Properties

Design Wavelength DWL (nm):
813

Substrate:
Crystalline Quartz

Retardance:
λ/2

Surface Quality:
20-10

Retardance Tolerance:
λ/300 @ 20C

Transmitted Wavefront Distortion (RMS):
λ/10 @632.8nm

Coating Specification:
R<0.2% @ 813nm on each surface

Retardance Order:
Zero

Coating Type:
Anti-Reflection

Threading & Mounting

Mount Thickness (mm):
6.00 ±0.2

Mount:
Anodized Aluminium

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 UV to NIR
- 12.7 and 25.4mm Diameters for Easy Integration

Half Waveplates for Quantum Computing are ideal for the manipulation of polarization states in trapped ion, linear optical, and neutral atom quantum computing, as well as quantum cryptography and communication applications. These waveplates 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), and offer a retardance of λ/2 and a retardance accuracy of λ/200.

Depending on wavelength, these waveplates feature either a first or zero-order construction for a low temperature-sensitivity, and are AR-coated for maximum transmission at the design wavelength to ensure optimal performance with low light signals. Half Waveplates for Quantum Computing are housed in a black, anodized aluminum mount and are available in both a 1'' and more compact ½'' size for easy integration into space sensitive systems. Polarizing Cube Beamsplitters for Quantum Computing are also available, and custom wavelengths are available for both.

Technical Information

Wavelength (nm)	Application Type
366	Trapped Ion
392	Trapped Ion
435	Trapped Ion
495	Trapped Ion
679	Neutral Atom
689	Neutral Atom
795	Neutral Atom
813	Neutral Atom
815	Neutral Atom

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