Product

**Ultrahigh vacuum cell**

*Anti-reflection* coated on inside and outside surfaces of all cell walls

*Bakeable* to high temperatures

*Assembled* without epoxies or frits

Product Description

ColdQuanta’s high-quality glass cells offer a new level of optical access to in-vacuum experiments. Assembled with an optical contacting process, the cells provide high-quality AR coatings while maintaining very high optical flatness in the cell walls, enabling minimal optical distortion through the cell. The cells are connected to the flange through an anodic bond to a silicon transfer, and have no epoxy or frits, giving them excellent outgassing properties.

Related Products

The square AR coated cells are frequently used in conjunction with:

- **miniMOT**
- **RuBECi**
- **Double MOT**
- **MOT Coil assembly**
- **3 axis coil assembly**

SQUARE AR COATED CELLS

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**Product Specifications**

<table>
<thead>
<tr>
<th>Product</th>
<th>Specification</th>
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<tbody>
<tr>
<td><strong>Optical Flatness</strong></td>
<td>&lt; λ/2 per cm peak-valley flatness</td>
</tr>
<tr>
<td><strong>Wall Thickness</strong></td>
<td>3 ±0.05 mm</td>
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<tr>
<td><strong>AR Coating</strong></td>
<td>IBS AR coating. Stocked as Broadband (BB) or targeted for rubidium, cesium, potassium, and optical trapping at 1064nm (CRK)</td>
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<tr>
<td><strong>Temperature Range</strong></td>
<td>up to 300 °C</td>
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<tr>
<td><strong>Vacuum Connection</strong></td>
<td>DN16 (1.33”) or DN40 (2.75”) CF flange</td>
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<tr>
<td><strong>Cell Material</strong></td>
<td>Schott Borofloat-33</td>
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</table>
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Product Options

Cell ID dimensions

D = 20 ± 0.25 mm x L = 60 ± 1 mm

Flange

DN16: H = 48 ± 2 mm OAL
DN40: H = 48 ± 2 mm OAL

Product numbers

2cm on DN16: SAR-2016-COAT  2cm on DN40: SAR-2040-COAT

Specify either of the following in place of COAT:

BB for a broadband coating
CRK for a Rubidium, Cesium, Potassium and 1064nm targeted coating

Mechanical Drawing (SAR-2016 shown)