Moxtek® manufactures low-power, miniature x-ray sources for a variety of applications including handheld and benchtop instruments. Moxtek sources are small, lightweight, and can be packaged into custom enclosures. The MAGNUM® x-ray source produces high output with a small spot size.

### Applications

#### Materials Characterization and Identification (XRF)
- Metal and alloy sorting
- Mining and geology
- Environmental analysis
- Lead in paint
- Regulatory (RoHS/WEEE)
- Art and archeometry
- R&D

#### X-ray Imaging
- Medical R&D, small animal imaging
- Security
- Radiographic inspection

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### 40kV MAGNUM Specifications

#### Mechanical Specifications:
- **Tube Type:** Metal-ceramic
- **Cathode Type:** Tungsten filament
- **Operating Temperature:** -10 to +50 °C
- **Storage Temperature:** -25 to +85 °C
- **Cooling:** Conduction
- **HV Insulation:** Silicone potting
- **Weight:** 1 lb. (450g)
- **Available Targets:** Ag, W, Au, Pd, Ta, Rh

#### X-ray Tube Characteristics:
- **HV Polarity:** Grounded anode
- **High Voltage:** -4 to -40kV
- **Beam Current:** 0 to 0.10mA
- **Total Power:** 4.0 watts (maximum)
- **Stability:** <1.0% RSD
- **Window:** Beryllium, 0.25mm thick
- **Battery Input Power:** 7-12 VDC
Ordering Information

<table>
<thead>
<tr>
<th>Part Number</th>
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<td>TUB00045-AG1</td>
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<tr>
<td>TUB00045-RH2</td>
<td>Rh</td>
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</table>

- MAGNUM® tube potted in a brass shield
- High voltage power supply
- Standard high voltage wiring length of 11.5 inches

Source Controller Options

- FTC-200 Controller. Source can also operate using analog DC voltage signals.

Customizable Options

- Variable high voltage wiring length (4.0 to 11.5 inches)
- Target materials

40kV MAGNUM® Mechanical Drawing