

# MOXI™ MAGNUM 50kV Source

## X-ray Sources Datasheet



MOXI™ Magnum 50kV Source

### Applications

- Handheld XRF
- Imaging

The Moxtek® MOXI™ MAGNUM (50kV 4W) X-ray Digital Source gives the most accurate and repeatable analytical results available today. The new digital power supply coupled with the reliable Magnum x-ray tube are combined as a X-ray source that is designed specifically for the next generation handheld market. MOXI has exceptional voltage accuracy ( $\pm 0.25\text{kV}$ ) across the temperature range  $0^\circ\text{C}$  to  $45^\circ\text{C}$ .

Features	Benefits
Small, compact design	Close coupling of detector/ source
Lightweight	Reduces weight of the XRF instrument
Stable output across all high voltage settings	High Precision of measurements, low detection limits
Rh target and high emission current at low kVs	Improved light element detection limits and precision
High x-ray output	Short sampling time
Small spot size	Small sampling area on the sample

*Tube type:* Metal-ceramic

*Operating Temperature:*  $-10^\circ$  to  $+60^\circ\text{C}$

*Storage Temperature:*  $-25^\circ$  to  $+80^\circ\text{C}$

*Cooling:* Conduction

*Weight:* 380g (typical)

*Available Targets:* Ag, Rh, W

### X-ray Tube Characteristics

*HV Polarity:* Grounded anode

*High Voltage:* -5 to -50kV

*Beam Current:* 5 to 200 $\mu\text{A}$

*Total Power:* 4 watts (100% on time)

*Focal Spot:* 800 $\mu\text{m}$  (typical)

*Window:* Beryllium 0.125mm or 0.250

*Battery Input Power:* +9 VDC

*High Voltage Accuracy:*  $\pm .25\text{kV}$   $0^\circ\text{C}$  to  $45^\circ\text{C}$

*RoHS Compliant:* RoHS3

*Standard Warranty:* 1 year or 2000 operating hours



**Moxtek, Inc.**  
452 West 1260 North  
Orem, UT 84057

801.225.0930  
[moxtek.com](http://moxtek.com)

#### WARNING

X-rays are emitted from the sides and ends of this product when energized. Moxtek takes actions to reduce the exposure rate from X-rays emitted from the sides through the use of various shielding agents inherent to this product design. It is the buyer's responsibility to ensure adequate protection is provided in the testing and manufacturing of the final product and that users are adequately shielded from incidental exposure. This product contains a beryllium window. The inhalation of fumes or dust from beryllium metal (or its compounds) are hazardous. Corrosion may occur on the beryllium window during use, these should not be scraped off, machined, or removed. Disposal of the tube unit should conform to federal, state, and local regulations governing beryllium.