

# MAGNUM® reflection x-ray source with 50 kV cable



MAGNUM® reflection source with 50 kV TUB00050

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.

Features	Benefits
Small, compact design	Close coupling of source to detector
Lightweight	Portable, easy to integrate
Stable output	Enables precise calibrated measurements
Low power consumption	Long battery life
Low spectral contamination	High precision of analysis
High x-ray output	Short sampling time
Customized configurations	Flexible form factor

## Applications

### X-ray imaging

- Medical R&D, small animal imaging
- Security
- Radiographic inspection

### 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

### Standard package

- MAGNUM® reflection target tube potted in a brass shield
- High voltage power supply
- High voltage wire 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

Mechanical specifications	
Tube type	Metal-ceramic
Cathode type	Tungsten filament
Ambient temperature	-10 to +50 °C
Storage temperature	-25 to +85 °C
Cooling	Conduction
HV insulation	Silicone potting
Weight	450 g (1 lb.)
Available targets	Ag, W, Au, Pd, Ta, Rh

Source characteristics	
HV polarity	Grounded anode
High voltage potential	-10 to -50 kV
Beam current	0.005 to 0.20 mA
Total power	10 watts (maximum)
Focal spot size	Typical 300 µm
Stability	< 1.0% RSD
Window	Beryllium, 0.25 mm thick
Input power	9 –12 VDC
Focal spot	FWHM
Standard warranty	One year

Ordering information	
Part number	Anode type
TUB00050-AG1	Ag
TUB00050-W01	W
TUB00050-PD1	Pd
TUB00050-TA7	Ta
TUB00050-RH2	Rh
Please contact us for price and delivery information.	