

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



TUB00082



TUB00083

The Moxtek® 50 kV monoblock x-ray source is a small, low power device used for a variety of applications including handheld, portable, and bench top instrumentation.

Features	Benefits
Small, compact design	Close coupling of detector/ source
Lightweight	Portable, easy to integrate
Stable output	High precision of measurements, low detection limits
Low power consumption	Long battery life
Low spectral contamination	Clean spectrum, high precision of analysis
High x-ray output	Short sampling time
Small spot size and short spot-to-object distance	Good geometrical magnification and spatial resolution

Mechanical specifications	
Tube type	Metal-ceramic
Ambient temperature	-10 to +50 °C
Storage temperature	-25 to +85 °C
Cooling	Air
HV insulation	Silicone potting
Weight	~350 g

## Applications

### X-ray imaging

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

### 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

Source characteristics	
Available targets	Ag, W, Rh
HV polarity	Grounded anode
High voltage potential	4 to 50 kV
Beam current	0 to 0.200 mA
Maximum power	4.0 watts
Focal spot size	Typical ~400 µm
Window	Beryllium, 0.25 mm thick
Input power	6 –12 VDC
Focus-to-object distance	2.2 mm
Standard warranty	One year