

X-RAY Sources

50kV MAGNUM[®] X-ray Tubes



Applications

Portable XRF

- RoHS/WEEE
- Alloy sorting
- Soil analysis
- Environmental
- Lead in paint
- Plastics analysis
- Material ID
- Security

Handheld Imaging

- Medical/Dental
- Material ID
- Security

Bench top EDXRF

Instrument Calibration

Micro-Fluorescence

Micro-Diffraction

The MAGNUM[®] x-ray tube is now available in a 50kV package. The MAGNUM 50kV x-ray tube is a low power, miniature x-ray tube used for a variety of applications including handheld and benchtop instrumentation. MAGNUM x-ray tubes are small, lightweight, and can be packaged into custom enclosures.

Features	Benefits
Small, compact design	Close coupling of source to detector
Lightweight	Portable, versatile, comfortable
Close coupling of collimator and target	Higher x-ray output with lower power tube
Stable output	Low detection limit
Low power consumption	Long battery life
Low spectral contamination	Clean spectrum
High x-ray output	Short sampling time
Customizable configurations	Flexible form factor

Standard Package Includes:

- Transmission Target (End Window)
- MAGNUM tube potted in a brass shield
- High voltage power supply
- Standard High voltage wire length is 11.5 inches

Customizable Options:

- Target materials and thickness
- Tube shield design
- Power supply packaging
- High voltage wiring length (minimum 4.0 inches; maximum 11.5 inches)
- Integrated tube and power supply
- DB9 Cable (ASM00362)
- 2 pin IDC cable (ASM00364)



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MOXTEK[®] www.moxtek.com

50 kV MAGNUM

Mechanical Specifications

Tube Type:	Metal-ceramic
Cathode Type:	Tungsten filament
Ambient Temperature:	-10° to +50° C
Storage Temperature:	-40° to +60° C
Cooling:	Conduction
HV Insulation:	Silicone potting
Weight:	≈1.1 lb. (500g)
Available Targets:	Ag, W, Pd, Rh

50 kV MAGNUM

X-ray Tube Characteristics

HV Polarity:	Grounded anode
High Voltage Potential:	10 to 50 kV
Beam Current:	0 to 0.200 mA
Maximum Power:	10 watts
Focal Spot Size:	Typical ~ 400 μm
Stability:	< 1.0% RSD
Windows:	Beryllium, 0.25 mm thick
Input Power:	20W (9-12 VDC)
Standard Warranty	One year

50kV Ordering Information

Part Number	Anode Target Material
TUB00050-1	Ag
TUB00050-2	W
TUB00050-4	Pd
TUB00050-7	Rh

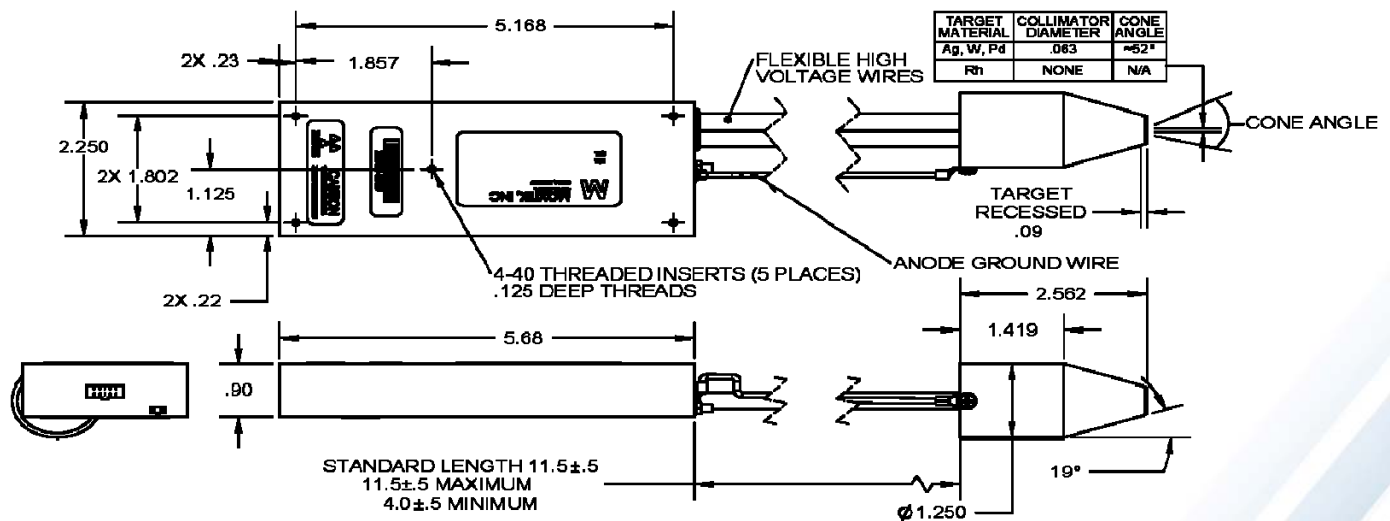
Tube Control Options

- TUB00051 FTC-200 Controller
- ASM00362 DB9 Cable
- ASM00364 2-pin IDC Cable

Please contact MOXTEK for price and delivery information.

See Moxtek for Target thicknesses

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