

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

- Small, compact design
- Lightweight
- Close coupling of collimator & target
- Stable output
- Low power consumption
- Low spectral contamination
- High x-ray output
- Customizable configurations

Benefits

- Close coupling of source to detector
- Portable, versatile
- Efficient utilization of x-rays
- Low detection limit
- Long battery life
- No unwanted peaks
- Short sampling time
- 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

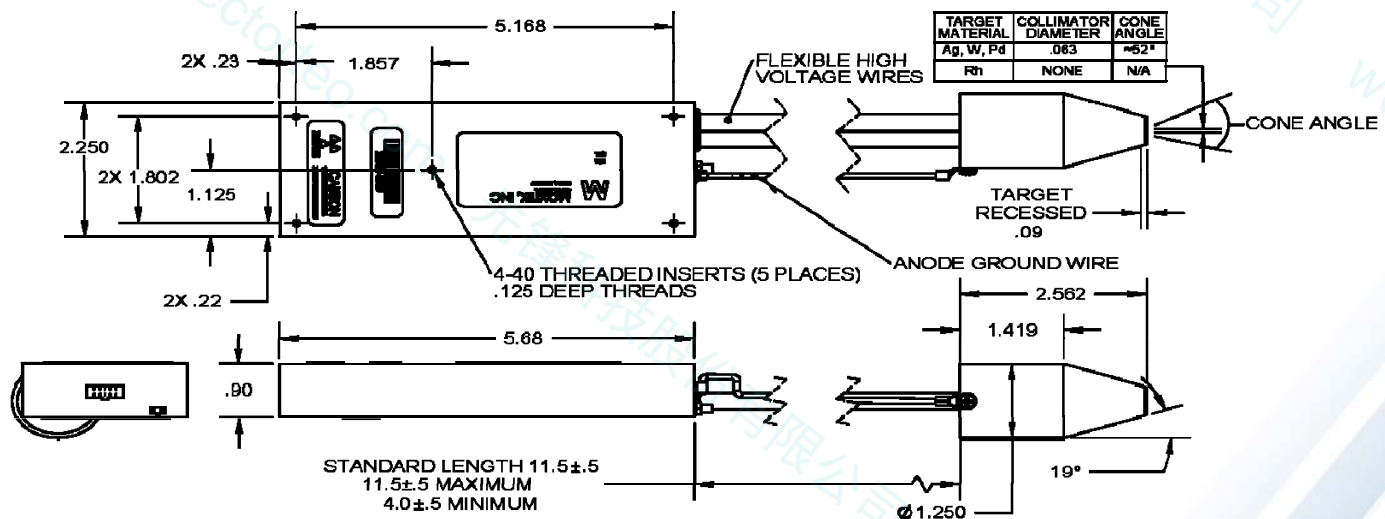
Tube Control Options

- 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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