



MOXI™ Magnum 50kV Source

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°C to 45°C .

Applications

- Handheld XRF
- Imaging

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

Mechanical Specifications

Tube type: Metal-ceramic
Operating Temperature: -10° to $+60^\circ\text{C}$
Storage Temperature: -30° to $+80^\circ\text{C}$
Cooling: Conduction
Weight: 310g (typical)
Available Targets: Ag, W, Au, Pd, Rh

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°C to 45°C
RoHS Compliant: RoHS3
Standard Warranty: 1 year or 2000 operating hours

Ordering Information

Part Number	Anode Type	Be Foil Thickness (μm)
TUB00190-AG1	Ag	250
TUB00190-W01	W	250
TUB00190-AU1	Au	250
TUB00190-PD1	Pd	250
TUB00190-AG2	Ag	125
TUB00190-RH2	Rh	125
TUB00190-RH3	Rh	125

Standard Package

- MAGNUM® tube potted in a brass shield
- High voltage power supply potted on an aluminum shell

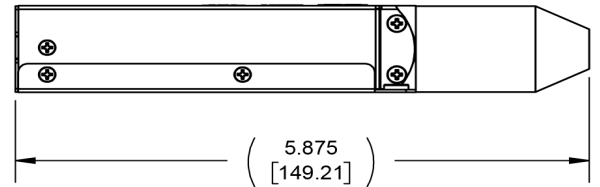
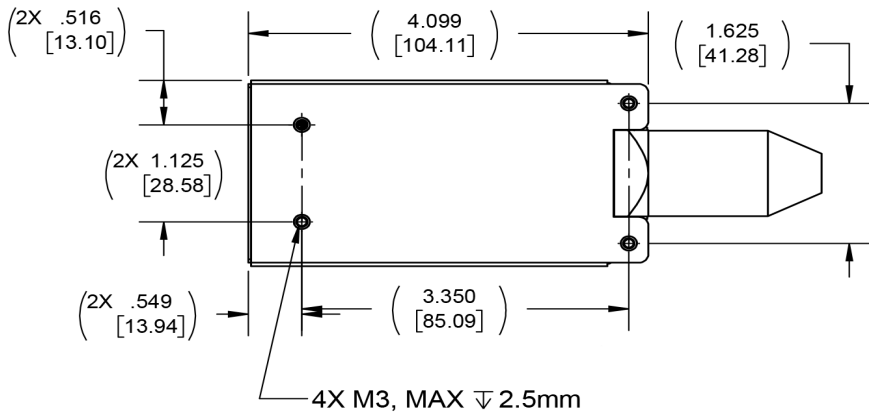
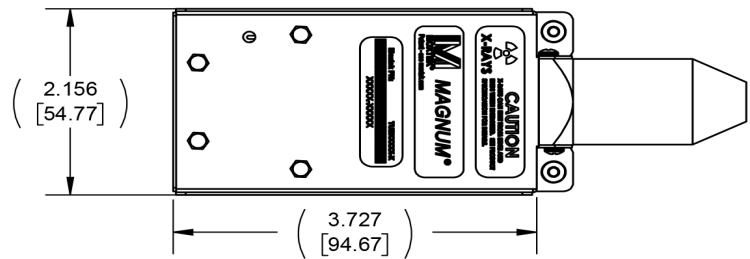
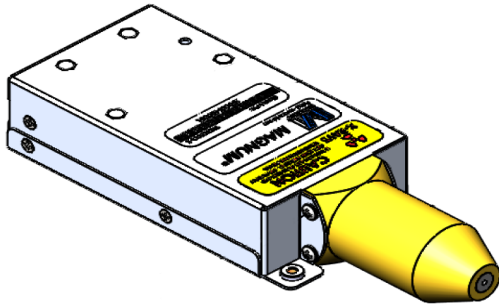
Source Controller Options

- Please discuss specifics with our sales engineers, xrayorders@moxtek.com

*Customizable Options- Customer to Specify

- Customizable geometric configurations available
- Additional target materials available

4W MOXI MAGNUM Mechanical Drawings



⚠ 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.



452 West 1260 North / Orem, UT 84057
 Phone 801.225.0930 / Fax 801.221.1121
www.moxtek.com
info@moxtek.com