



MAGPRO 60kV 12W

Applications

Materials Characterization and Identification

XRF

- Elemental composition

XRD

- Powder diffraction
- Residual stress

Notes

- Operating Temperature: Moxtek recommends a warm up period of 10 minutes before running below 0°C

Moxtek® MAGPRO 60kV 12W X-ray sources are purposefully designed for integration into both portable and benchtop XRF instruments. This source provides optimized power levels, rendering them ideally suited for material analysis in a wide spectrum of applications.

Feature	Benefits
Small, compact design	Close coupling of detector/ source
Lightweight	Portable, easy to integrate
Stable output	High Precision of measurements, low detection limits
Multiple communication protocols	Improved heavy element analysis
High x-ray output	Short sampling time
Small spot size	Possible coupling with optics, good image resolution

Mechanical

Specifications

60kV Imaging Source

- Tube Type:* Metal-ceramic
- Operating Temperature:* -10 to +50° C
- Storage Temperature:* -30 to +85° C
- Cooling:* Forced air
- Weight:* ≤ 900g (typical)
- Available Targets:* W

X-ray Tube Characteristics

- HV Polarity:* Grounded anode
- High Voltage:* -6 to -60kV
- Beam Current:* 70 to 1000µA
- Total Power:* 12 watts (maximum)
- Focal Spot:* Typical ~500µm FWHM
- Window:* Beryllium 125µm or 250µm (depending on target)
- Radiation Leakage:* 2mR/h at 50mm
- Input Power:* 24 VDC, 1.1A
- Standard Warranty:* 1 year or 2000 operating hours

⚠ 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.