60kV MAGPRO™ x-ray sources



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

Applications

Materials Characterization and Identification

XRF

Elemental composition

XRD

- Powder diffraction
- Residual stress

Mechanical Specifications	
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	-6kV to -60kV
Beam Current	70μA 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

Notes

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



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.



Input Power

Standard Warranty



24 VDC, 1.1A

1 year or 2000 operating hours