

120 kV & 5 WATT COMPACT X-RAY SOURCE

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Moxtek Inc,

Moxtek has developed an integrated 120 kV X-ray tube with high voltage power supply intended for use in portable devices. This small device, with photon energies of 120keV, expands the accessibility of miniature X-ray sources for the XRF, NDT, imaging, and security markets. The low weight of 1.5kg, self-shielding radiation, and battery-powered design make it ideal for portable handheld devices. The bipolar transmission window eliminates the detrimental artifact of the heel-effect for imaging applications. This design also enables the X-ray output to be easily configured for either cone or fan beam output. I will present information on the benefits to imaging applications of a small round spot in transmission design that provides high uniform contrast and minimum geometric distortions.