

The Apogee 5500 Series is a 50kV, 50W packaged X-ray tube designed for applications where high flux density and continuous operation are important.

Utilizing our high stability, high intensity X-ray tube technology coupled with grid-controlled variable focus enables our Apogee design to produce very small focal spots; this makes the Apogee 5500 Series ideal for most industrial inspection and non-destructive testing applications that require high resolution, including PCB assembly, battery, plastic, metal and mechanical parts inspection. Flexible and reliable, this unit is also well suited for use with X-ray optics.

The Apogee 5500 Series is configured in a compact stainless steel, lead-lined package filled with dielectric oil, which enables the unit to provide maximum X-ray shielding and heat dissipation. The design includes high voltage and filament connectors, making it ideal for plug and play operation.



Benefits

- Wide operating range enables optimal image contrast
- Stable X-ray output delivers high-precision measurements
- Low attenuation beryllium window ensures high transmission of low energy X-rays
- Fully shielded compact package eliminates X-ray leakage and easily integrates into your system

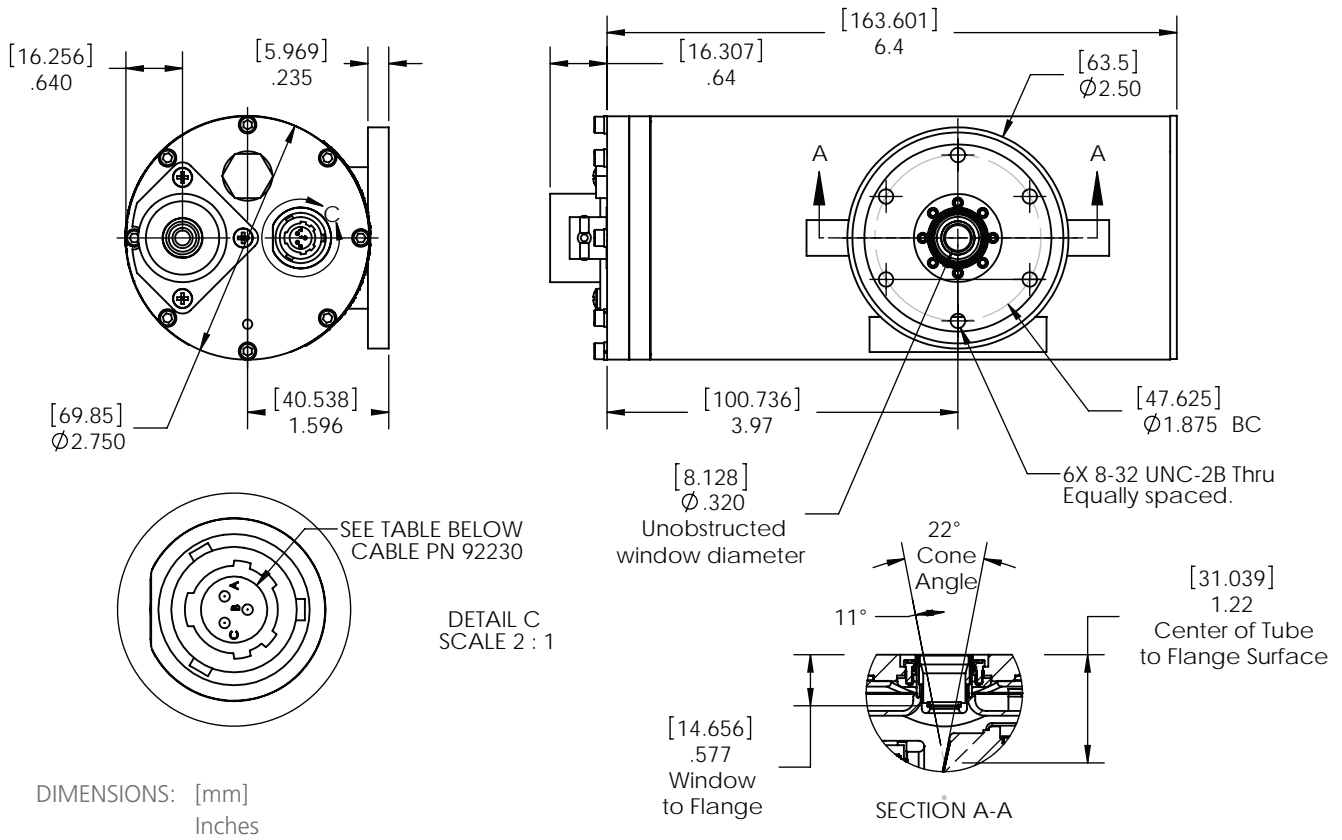
Applications

- Medical Imaging
- Inspection of printed circuit boards and electronic devices
- Non-destructive testing of plastic, metal and mechanical parts
- Thickness gauging
- Analytical XRF

Specifications	
Operating Voltage Range:	10-50kV
Maximum Power:	50W
Maximum Beam Current:	1.0mA
Grid Voltage:	0-100V (Oxford Shasta Power Supply recommended)
Maximum Filament Current:	1.7A
Filament Voltage:	2.0V (Nominal)
Target Material:	See product ordering table on next page
Focal Spot Size:	35µm *nominal per IEC60336, NEMA XR5-1992 (R1999)
Cone of Illumination:	22°
Spot to Window Spacing (FOD):	31.05mm ±1mm
Target Angle:	12°
Window Material and Thickness:	Be @ 127µm
Flux and Current Stability:	≤ 0.2% over 4-hour period
Ambient Temperature Conditions:	Operating: 0 to 40°C / Storage: -10°C to 50°C
Humidity:	0-95% RH up to 5,000 feet
Cooling:	150 CFM forced air recommended. Case temperature should not exceed 46°C in continuous duty applications. Case temperature may be allowed to reach 50°C in intermittent duty cycles such as benchtop instruments. Contact sales@oxinst.com to discuss your specific cooling applications.
Shielding:	0.25mR/hr @ 2" (except HV connection through HV cable)
Dimensions:	180mm L X Ø70mm (7.09" L X Ø2.76")
Weight:	2.26kg (5.0 lbs)



Apogee 5500 Series Radiation Shielded X-ray Tube



Pin	Oxford Cable Wire	Description
A	Red	Filament
B	Black	Filament Return
C	Clear	Grid Bias
Backshell	Eyelet	Ground

Product Ordering Table	
Part Number	Target Material
93501	W
93502	Mo
93504	Rh
93510	Cu

visit www.oxford-instruments.com/xt or xray-sales@oxinst.com for more information

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