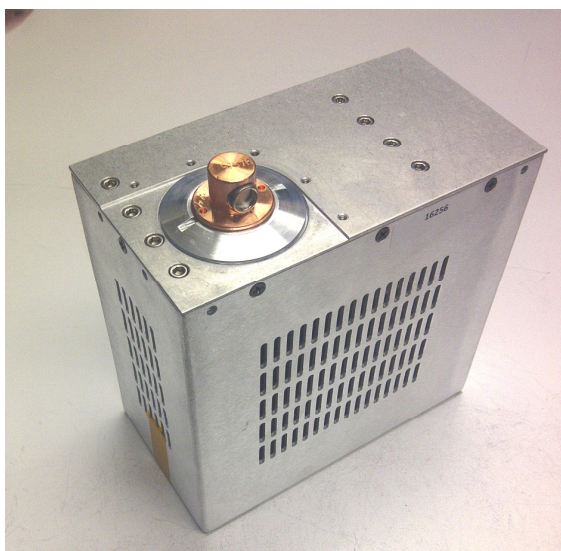
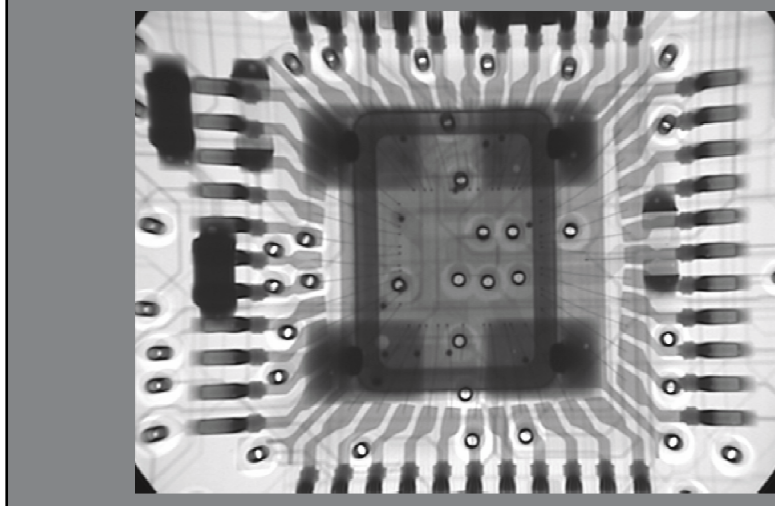
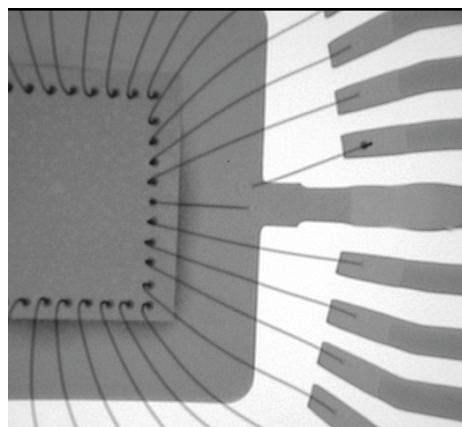


The Thermo Scientific X-Ray product line has been providing quality X-Ray sources to the industrial and medical imaging markets since 1978. Known and respected for innovation and superior microfocus technology, we are proud to now introduce the next level of completely integrated minifocus X-Ray sources – the Thermo Scientific DXS11 high-resolution MiniFocus X-Ray source.

Thermo Scientific DXS11 High-Resolution MiniFocus X-Ray Source



Thermo Scientific DXS11 X-Ray sources feature an integrated design with X-Ray tube, power supply, and control electronics in one package. Printed circuit board with IC shown at right. IC lead frame with wire sweep below.



Description. The Thermo Scientific DXS11 X-Ray source is a minifocus X-Ray Source for use in high resolution imaging applications. The small spot size, combined with stable high intensity output, allow superior quality 2D and 3D images. The X-Ray source combines the side window X-Ray tube, high-voltage power supply, and controller in one compact package powered from a 28 VDC source.

Applications. The Thermo Scientific DXS11 X-Ray source is the ideal choice for:

- Manual and automated inspection of printed circuit boards and most electronic devices
- Nondestructive test requiring moderate to high-resolution imaging of metal and plastic parts
- CT imaging for industrial and life sciences applications

Benefits. Thermo Scientific DXS11 X-Ray sources offer many attractive benefits:

- X-Ray tube, power supply, and control electronics in one compact package make system integration easy
- Simple, robust design for ease of installation and long life
- 80kV model with 30 micron spot for high-resolution electronics imaging
- 50 kV 25 Watt model for life sciences imaging
- Digital interface allows user access to diagnostics and operating logs, Source can be operated with the supplied graphical user interface or with customer generated software.
- Auto-conditioning ramps source up slowly as required by the time source has been off.

Thermo Scientific DXS11 Specifications

Parameter	DXS11-5025	DXS11-8015	DXS11-7020
Operating Voltage Range	10-50kV	40-80kV	40-70kV
Maximum Power	25W at 50kV	12 W at 80kV	14 W at 70kV
Maximum Beam Current	0.50 mA, 43-50kV	0.10 mA at 20kV, 0.15 mA, 60-80kV	0.20 mA, 60-70kV
Spot Size	65 μ at 50kV 25W	30 μ at 80kV 12W	
Spot Ellipticity (all models)	< 20% typical		
Cone of Illumination	34° x 49°		
Spot to Window Spacing (FOD)	8.9 mm (0.35 in.)		
Window Diameter	Approximately 11.4 mm (0.45 in.) with frame		
Window Material and Thickness	Beryllium: 0.13 mm		
(.005 in.) Target Material	Tungsten		
Ambient Temperature and Humidity	0 to 35°C, 0-95% RH, up to 5,000 feet altitude		
Method of Cooling	Internal fan is sufficient for ambient temperature up to 28°C ambient and up to 12W operation. Above 28°C ambient, or for continuous operation above 12W, cooling air must be directed at the unit.		
Shielding	Shielding is limited. User must provide adequate shielding to ensure safe operation.		
Weight	Approximately 5.2 kg (11.5 lb.)		
Input Power	28-31 VDC, 3 amps		

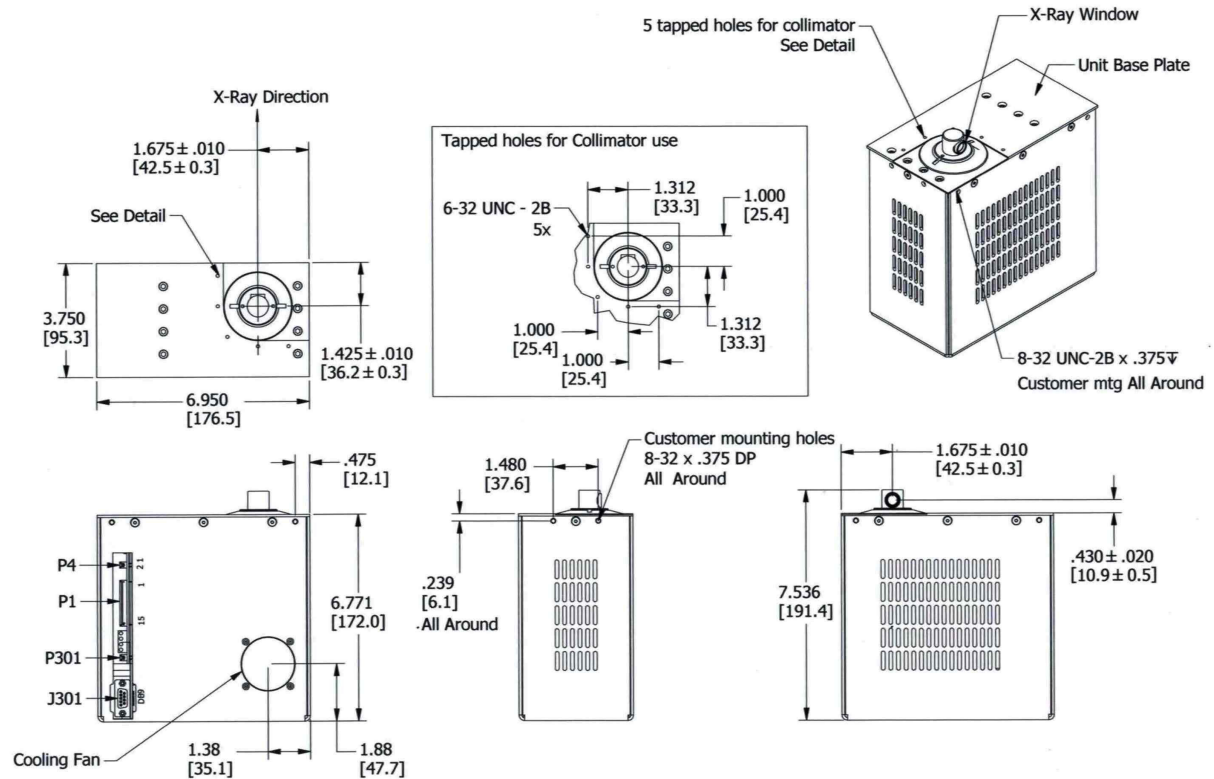


Figure 1. Outline drawing of Thermo Scientific DXS11 MiniFocus X-Ray Source
 Note: DXS11-7020-Rotated has tube rotated 90° CW.