

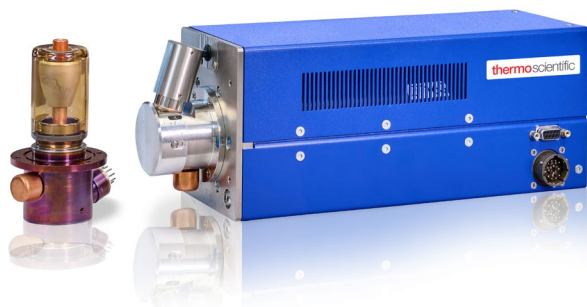
Thermo Scientific PXS15 Microfocus X-ray Sources

Thermo Scientific™ PXS15 Microfocus X-ray Sources provide an effective solution for demanding imaging and inspection tasks within the production environment. Primary applications include battery inspection, for both EV (electric vehicle) cells and relatively small and simple batteries such as the lithium cells used to power smart devices. More generally, PXS15 sources are used in other areas of component inspection, in non-destructive testing and for micro-CT (micro computed tomography). A wide beam variant of the core model provides the flexibility to tailor magnification and field of view for individual requirements. Both PXS15 options have a digital interface and are specified for high power and high magnification, with a rugged design that delivers the reliability required for routine industrial measurement.

Key features

- **Small, round spot:** to produce high-resolution, low distortion, high-quality images
- **Short FOD (focal object distance):** to deliver excellent geometric magnification and short image acquisition times
- **Large field of view:** to aid magnification and reduce image acquisition times
- **High flux and spot location stability:** to ensure consistent high-quality imaging with minimal temporal variation
- **Automatic source conditioning:** to minimize the risk of damage as the source comes up to operating conditions
- **Digital interface:** to enable easy operation with access to diagnostics and operating logs to ensure optimal on-going performance

Note: The two options in the PXS15 source range vary with respect to beam angle and field of view. Individual detailed specifications for the PXS15-NB and the PXS15-WB sources are included for reference.

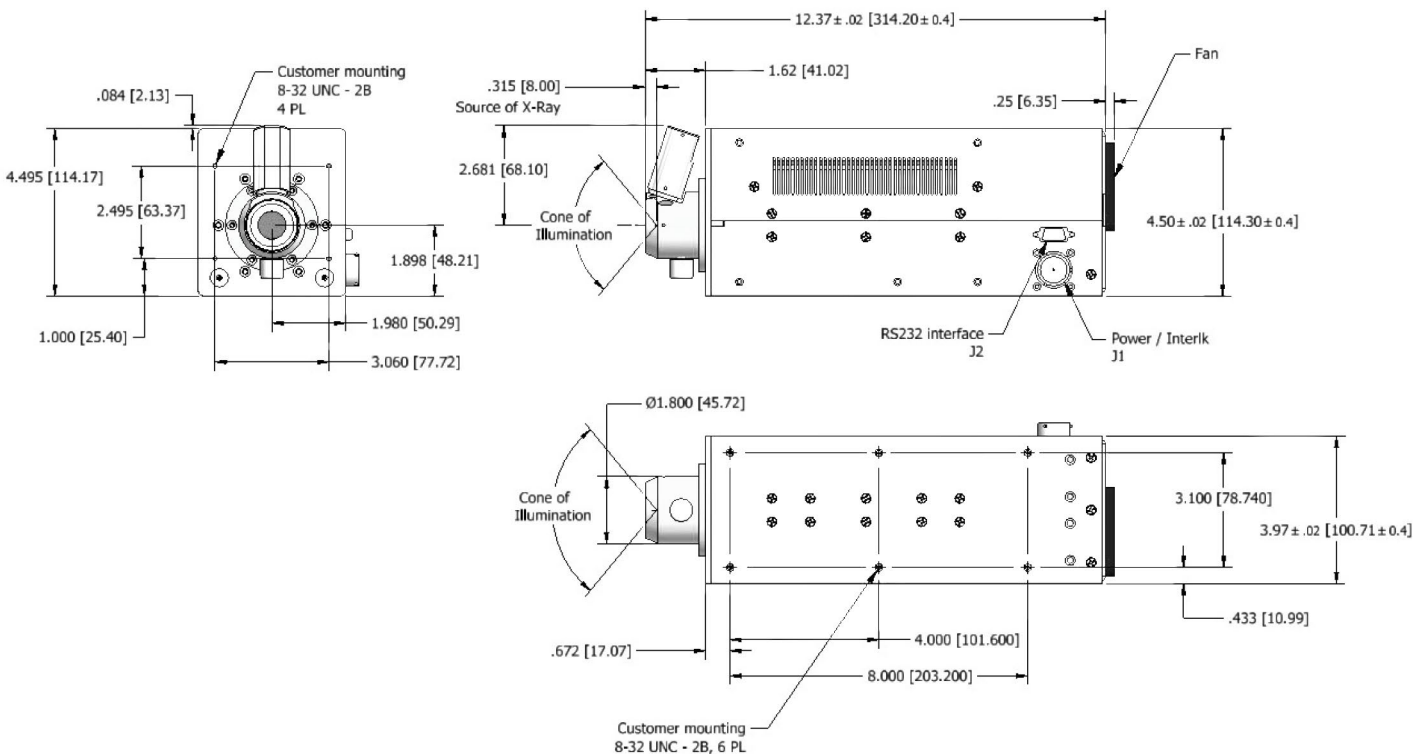


PXS15-WB X-ray Source

Specifications

PXS15-NB X-ray Source	
Maximum tube voltage	110kV
Operating voltage range	40–110kV
Tube current operational range	0–250μA
Maximum power output	25 W
Minimum focal spot size	5 μm
X-ray beam angle	90°
Focus to object distance (FOD)	7.5 ± 1.0 mm
Target material	Tungsten
X-ray output window material	Beryllium
Weight	5.7 kg
Ambient temperature and humidity	0–32 °C, 0–95% RH, up to 1,500 m (5,000 ft) altitude
Method of cooling	Internal fan is sufficient for ambient temperature up to 32 °C. Adequate air circulation around unit must be provided
Input power	24 VDC ± 3VDC, 4A max
Control interface	RS-232, digital

Outline drawing of PXS15-NB X-ray Source



Specifications

PXS15-WB X-ray Source	
Maximum tube voltage	110kV
Operating voltage range	40–110kV
Tube current operational range	0–250µA
Maximum power output	25 W
Minimum focal spot size	7 µm
X-ray beam angle	125°
Focus to object distance (FOD)	7.5 ±1.0mm
Target material	Tungsten
X-ray output window material	Beryllium
Weight	5.7 kg
Ambient temperature and humidity	0–32 °C, 0–95% RH, up to 1,500 m (5,000 ft) altitude
Method of cooling	Internal fan is sufficient for ambient temperature up to 32 °C. Adequate air circulation around unit must be provided
Input power	24VDC ±3VDC, 4A max
Control interface	RS-232, digital

Outline drawing of PXS15-WB X-ray Source

