

Driving future innovation with the ZEISS X-ray source

ZXR-1 X-ray source

Exclusively on ZEISS VersaXRM 730 X-ray microscope

Your ZEISS source for innovation

The ZXR-1 X-ray source from ZEISS is a unique innovation, designed specifically to integrate with the advanced VersaXRM platform. Purpose-built for the rigors of XRM imaging, ZXR-1 delivers consistently sharp, high-quality results—enabling users to achieve unparalleled resolution and performance without manual adjustments—resulting in perfect tomographies.

Every sample. Every user. Every time.



ZXR-1 X-ray source on VersaXRM 730.

Innovation showcase:

Designed for the unique challenges of 3D X-ray imaging

ZXR-1, the technologically distinctive ZEISS X-ray source, sets a benchmark for high-resolution X-ray imaging.

It features patented, actively cooled tungsten-diamond transmission target technology and intelligent, real-time electronic beam control for exceptional imaging stability and performance.

ZXR-1 is the platform on which future advanced capabilities that enhance imaging precision and quality will be built, further progressing VersaXRM as an ideal choice for the widest range of research requirements.

Lower cost of ownership:

Reduce your expenses with fewer source replacements

Investing in the ZXR-1 source means significant savings over time. Its extended operating life reduces the frequency and cost of replacements.

The unique architecture of ZXR-1 provides active cooling of the high-voltage power supply and emitter control electronics, ensuring outstanding thermal management and long-term reliability.

Reliability assurance:

Consistent performance with less downtime

The ZXR-1 source for the advanced VersaXRM 730 is engineered to deliver exceptional reliability while maintaining VersaXRM high performance standards with minimal unplanned downtime.

With more operating hours, ZXR-1 sets a new standard in longevity and dependability. This means fewer interruptions and more productive hours for your operations.

Patents

US12035451, EP4080541; US11961694, EP4080523; US11864300, EP4090137



Seeing beyond

When it comes to non-destructive 3D imaging, ZEISS Versa X-ray microscopes (XRM) provide you with unique, advanced capabilities from resolution to reconstruction. As the pioneer and global leader in X-ray microscopy, ZEISS serves the world's largest XRM installed base, trusted by researchers in over 7,000 scientific publications*.

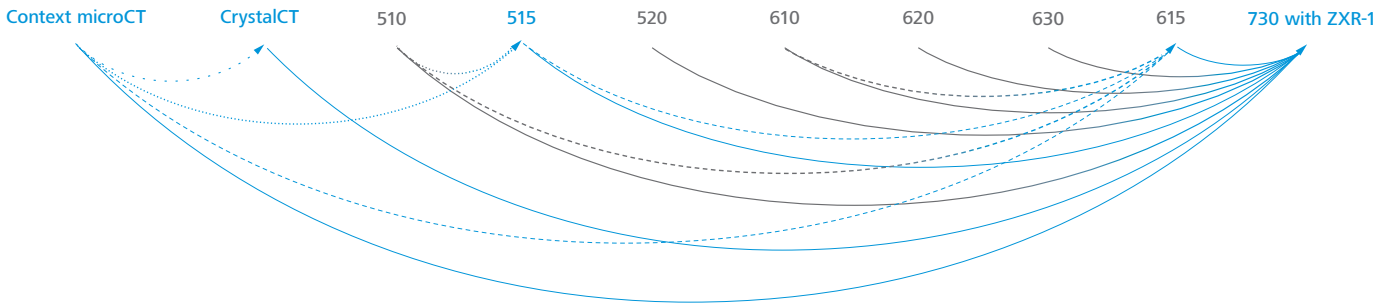
The VersaXRM 730 flagship X-ray microscope offers the highest resolution performance with ultimate spatial resolution <450 nm, while maintaining better than 500 nm resolution across the entire operating range from 30 – 160 kV. Enjoy sub-one-minute tomographies with continuous motion scanning.



ZXR-1 X-ray source on VersaXRM 730.

ZXR-1 Source Specifications	
Source type	Sealed
Tube type	Transmission
Accelerating voltage range	30 – 160 kV
Maximum power	25 W
Emitter type	LaB ₆
Target material	Tungsten
Maximum target current	156 µA

Our Protect Your Investment promise ensures that you always have access to the latest technology offered for this versatile platform. Now, by designing and developing its own field-upgradeable X-ray source, ZEISS also controls the future of innovation for its systems, enabling us to more rapidly address market trends and requirements.



Contact us to discuss your imaging requirements so we can provide you with more information about the benefits of ZXR-1 to your specific needs.

Scan the QR code or
 click on it and get
 in touch with us.

* Based on Google Scholar search: “zeiss versa’ + zeiss ,xradia versa’”

Not for therapeutic use, treatment or medical diagnostic evidence. Not all products are available in every country. Contact your local ZEISS representative for more information.
 EN_44_012_126 | Release 1.0 | CZ 01-2026 | Design, scope of delivery and technical progress subject to change without notice. | © Carl Zeiss Microscopy GmbH