



BRUKER Skyscan 2211 micro-CT Scanner specifications:

X-ray source	20190 kV, 4/10/25 W, submicron spot size, 5-position filter changer;
	Open (pumped) X-ray source with double stage electron optics;
	Target material – W standard; Cu, Mo, Ag optional
X-ray detectors	3 Mp active pixels CMOS flat panel 1920 x 1536 pixels and
	11 Mp cooled CCD 4032 x 2670 pixels
Reconstructed image	Flat panel: 1920 x 1920 x 1160 pixels (central position)
formats	3776 x 3776 x 1160 pixels (two offset positions)
	CCD: 4032 x 4032 x 2272 pixels (central position)
	8000 x 8000 x 2272 pixels (two offset positions)
Reconstruction speed	1 min 12 sec for a reconstruction of 2K x 2K x 1K from 600 projections,
	11 min for a reconstruction of 4K x 4K x 2K from 1319 projections
Object positioning	Direct drive air bearing with integrated micro-positioning stage using
	piezo-drives (5.5 mm travel)
Detail detectability	100 nm
Scanning volume	Maximum diameter 204 mm, length 200 mm, weight 25 kg
Radiation safety	<0.5 µSv/h at any point 10 cm from the instrument's surface
	(measured at 190 keV, 4 W power on target)
Power supply	100-130 V or 200-240 V AC, 50-60 Hz, 2.5 kW + 1.5 kW for compressor
	(peak current at start of 65 A
The system is supplied with closed loop water chiller and oil-free air compressor with necessary	
narticle filters and air dry	er

• Pixel sizes down to 100 nm for exceptional imaging detail, X-ray source acceleration voltage from 20 kV to 190 kV, submicron spot sizes and water cooling for stability

- Unique versatility by combining two cooled X-ray detectors in one system:
 - 3 Mp flat-panel for high X-ray energy and large field of view
 - 11 Mp CCD for optimal submicron resolution
 - Image reconstruction up to 8000 x 8000 x 2272 pixels after a single scan
 - World's fastest hierarchical 3D reconstruction (InstaRecon®) program with x10 to x100 speed-up
 - Precision air bearing rotation stage with <50 nm accuracy
- Maximum sample diameter of 204 mm and sample height of 200 mm, maximum object weight of 25 kg
- Integrated anti-vibration granite platform with pneumatic leveling, Integrated micro-positioning stage with precise piezo-drives
- Export of reconstructed results to phones and tablets for 3D volume rendering (iOS and Android)
- Images can be saved in multiple file formats, including DICOM, TIFF, JPG, BMP and PNG as well as AVI-format movies
- Fully shielded for maximum safety