

General specifications

Phoenix V tome x S240	
X-ray tube type	Open directional high-power microfocus X-ray tube, closed cooling water circuit. Optional additional (open) transmission high-power nanofocus X-ray tube
Max. voltage / power	240 kV / 320 W
	Dual tube option for nanoCT*: additional 180 kV / 20 W high-power nanofocus tube with Diamond window & easy tube exchange just by a push of a button
Geometrical magnification (3D)	1.39 x to 100 x; up to 400 x with nanofocus tube
Detail detectability	Down to < 1 μm (microfocus tube); optional down to 0.2 μm (nanofocus tube)
Min. voxel size	Down to 2 μm (microfocus tube)
	Optional down to < 1 μm (nanofocus tube)
Detector type (all according US ASTM E2597 standard)	Temperature stabilized Dynamic 4 200p+ large area detector with superior image and result quality, 410 x 410 mm (16" x 16"), 200 μm pixel size, 2036 x 2036 pixels (4 MP), extremely high dynamic range > 10000:1
	Optional temperature stabilized digital DXR detector array, 200 μm pixel size, 1,000 x 1,000 pixels, 200 x 200 mm (8"), 2 x virtual detector enlargement
	Optional DXR S100 Pro detector, 100 μm pixel size, 2,500 x 3,000 pixels for superior resolution imaging and outstanding detectability on a 300 mm x 250 mm large active area - optional with 1.3x virtual detector enlargement
Manipulation	5-axes metal precision manipulator, optimized construction for high mechanical stability
Focus-detector-distance	800 mm (8" detector + IMR) & 940 mm (16" detector)
Max. sample diameter x height	Max. 3D scan size up to 425 mm Ø x 360 mm with optional Offset CT (16"), max. 500 mm Ø x 275 mm with opt. Offset CT (8") detector
Max. sample weight	10 kg (22 lbs.)
Max. focus object distance	580 mm (microfocus tube)
System dimensions W x H x D	2,550 mm x 1,905 mm x 1,275 mm (100,4" x 75" x 50,2")
System weight	Appr. 4,050 kg / 8,990 lbs. (without ext. components)
Temperature stabilization	Active X-ray tube cooling & temperature stabilized detector
2D inspection bundle	Tilt and rotation axes for tilted 2D inspection of samples up to 10 kg (22 lbs.) & 2D X act inspection software including industry leading Flash!™ intelligent image processing technology for optimized failure detection
Optional High-flux target	2 times faster CT scans or doubled resolution; X-ray inspection power up to 100 W
Opt. measurement package (also upgrade option)	Phoenix Datos x CT software package measurement
	2 calibration objects
Opt. Helix CT & Offset CT	Advanced scanning trajectories for improved scanning volume and data quality: Helix CT for long part scans with less artifacts and better quality, Offset CT to scan bigger parts or same size with higher resolution
Opt. Click&measure CT	Optional fully automated CT process chain
Software	Phoenix Datos x 3D computed tomography acquisition and reconstruction software. Different 3D evaluation software packages for 3D metrology, failure or structure analysis on request
Radiation protection	Radiation safety cabinet for full protective installation without type approval according to German StrSchG/StrSchV. It complies with French NFC 74 100 and the US Performance Standard 21 CFR Subchapter J. For operation, other official licenses may be necessary.

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