

# General specifications

Phoenix V tome x S240	
<b>X-ray tube type</b>	Open directional high-power microfocus X-ray tube, closed cooling water circuit. Optional additional (open) transmission high-power nanofocus X-ray tube
<b>Max. voltage / power</b>	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
<b>Geometrical magnification (3D)</b>	1.39 x to 100 x; up to 400 x with nanofocus tube
<b>Detail detectability</b>	Down to <1 μm (microfocus tube); optional down to 0.2 μm (nanofocus tube)
<b>Min. voxel size</b>	Down to 2 μm (microfocus tube)  Optional down to <1 μm (nanofocus tube)
<b>Detector type (all according US ASTM E2597 standard)</b>	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
<b>Manipulation</b>	5-axes metal precision manipulator, optimized construction for high mechanical stability
<b>Focus-detector-distance</b>	800 mm (8" detector + IMR) & 940 mm (16" detector)
<b>Max. sample diameter x height</b>	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
<b>Max. sample weight</b>	10 kg (22 lbs.)
<b>Max. focus object distance</b>	580 mm (microfocus tube)
<b>System dimensions W x H x D</b>	2,550 mm x 1,905 mm x 1,275 mm (100,4" x 75" x 50,2")
<b>System weight</b>	Appr. 4,050 kg / 8,990 lbs. (without ext. components)
<b>Temperature stabilization</b>	Active X-ray tube cooling & temperature stabilized detector
<b>2D inspection bundle</b>	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
<b>Optional High-flux target</b>	2 times faster CT scans or doubled resolution; X-ray inspection power up to 100 W
<b>Opt. measurement package (also upgrade option)</b>	Phoenix Datas x CT software package measurement.  2 calibration objects
<b>Opt. Helix CT &amp; Offset CT</b>	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
<b>Opt. Click&amp;measure CT</b>	Optional fully automated CT process chain
<b>Software</b>	Phoenix Datas x 3D computed tomography acquisition and reconstruction software. Different 3D evaluation software packages for 3D metrology, failure or structure analysis on request
<b>Radiation protection</b>	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.