

	Phoenix Nanotom M
X-ray tube type	Proprietary open high-power nanofocus X-ray tube, optimized for long-term stability Internal X-ray tube cooling
Max. voltage / power	180 kV / 20 W
Target	Tungsten on CVD diamond for up to 2 times faster data acquisition at the same high image quality level Transmission target type, rotatable for multiple use (other target materials, e.g. molybdenum on request)
Filament	Tungsten hairpin, pre-adjusted plug-in cartridges for fast and easy exchange
Geom. magnification (3D)	1.4 x - 300 x
Detail detectability	Down to 200 nm (0.2 microns)
Min. voxel size	Down to 300 nm (0.3 microns)
Detector type	Temperature-stabilized high dynamic DXR, 14 bit, 1.5 x detector enlargement (max. 4,600 pixel detector width)
Pixels	3,072 x 2,400
Pixel size	100 µm
Manipulation	Granite based 5-axes manipulator with vibration insulation, precision rotation table on air bearings
Variable focus detector distance	from 200 mm to 600 mm
Max. sample diameter	< 1 mm to 240 mm
Max. sample height / weight	250 mm / 3 kg (6.6 lbs.)
Sample travel length Y / Z	250 mm / 400 mm
Rotation	0° - 360° x n
System dimensions	1,980 mm x 1,600 mm x 925 mm (78" x 63" x 36.4")
System weight	Appr. 1,900 kg / 4,190 lbs.
Optional 3D measurement package	Temperature stabilized cabinet, high accuracy direct measuring system, Calibration object, Datos x module packages "metrology" and "Click & measure CT"
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.
CT reconstruction	Phoenix Datos Velo CT high-speed
Basic Datos x modules	Auto ROI, Sector scan, Fast scan, Multi scan, Multi volume reconstruction, AGC module - automatic geometry calibration, BHC+ module - automatic beam hardening correction, RAR module - ring artefact reduction,
Optional modules	Datos x module package 3D "measurement", Datos x module package "Click & measure CT"
Optional advanced sample manipulation	Manual XY highly accurate positioning table, tensile & compression testing stage system, coolstage specimen cooling unit Motorized XY-table with two linear axes
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 system operation, other official licenses may be necessary