Technical Data

Essential Specifications	SUPRA® 40	SUPRA® 55	SUPRA® 60
Resolution (optimal WD) *All resolution specifications are dependent on the system configuration.*	1.0 nm @ 15 kV 1.9 nm @ 1 kV	0.8 nm @ 15 kV 1.6 nm @ 1 kV	
Magnification	12 - 1,000,000 x		
Emitter	Thermal field emission type		
Acceleration Voltage	0.02 - 30 kV		
Probe Current	Configuration 1: 4 pA - 20 nA / Configuration 2: 12 pA - 100 nA		
Detectors	High efficiency in-lens detector, Everhart-Thornley Secondary Electron Detector,		
	Cap mounted AsB® detector		
Chamber	330 mm (Ø) x 270 mm (h), 2 EDS ports 35° to optional axis, CCD-camera with IR illumination,	330 mm (Ø) x 270 mm (h), 3 EDS ports 35° to optical axis, CCD-camera with IR illumination,	520 mm (Ø) x 300 mm (h), 2 EDS ports 35° to optical axis, Integrated 8" airlock, CCD-camera with IR illumination
	Additional 3rd EDS port 35° to optical axis	Chamber for fully focussing WDS spectrometer	
Specimen Stage	5-Axes Motorised Eucentric Specimen Stage X = 130 mm, Y = 130 mm, Z = 50 mm, T = -3 - +70° R = 360° (continuous)		6-Axes Motorised Super-Eucentric Specimen Stage X = 152 mm, Y = 152 mm Z = 43 mm Z' = 10 mm T = -15 - 60° R = 360° (continuous)
	6-Axes Eucentric Stage X = 100 mm, Y = 100 mm, Z = 42 mm, Z'= 13 mm, T = -4 to 70°, R = 360° (continuous)		
Image Processing	Resolution: Up to 3072 x 2304 pixel, Noise reduction: Seven integration and averaging modes		
Image Display	Single 19" TFT monitor with SEM image displayed at 1024 x 768 pixel		
System Control	SmartSEM®* with Windows®XP, operated by mouse, keyboard and joystick with optional control panel		
Space Requirement	Minimum footprint: 1.97 m x 1.73 m, Minimum working area: 3.5 m x 5.0 m		Minimum footprint: 2.81 m x 1.73 m, Minimum working area: 3.5 m x 5.0 m
SmartSEM® – Fifth generation SEM control Graphical User Interface*			

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