

Nova NanoSEM 230 Specification Notes

General Features	
User-Friendly Windows xT Software	Icon interface for automated operating parameters: vacuum, accelerating voltage, aperture/spot size, magnification and focus, brightness/contrast, working distance (WD) calibration, mapping coordinates, beam optimization, image acquisition (TIFF), EDS Elemental Analysis
Schottky Field Emission Gun	High resolution, high current (up to 100 nA), low signal-to-noise
Probe Current	0.6 pA-100 pA continuously adjustable for depth-of-field elemental analysis
Horizontal Field	4.0 mm at 5.0 mm WD
Specimen Exchange	Change without switching off high tension and emitter
4-Axis Motorized Stage	50 mm X, Y, Z; -15°-60° tilt; 360° continuous rotation; 2 μ repeatability
Resolution	1.6 nm at 1 kV
Low vacuum non conductive, biological, reduce charging effects20-850K	
Digital Image/Pattern Processing	
Dwell	50 ns-1 ms
Resolution	Up to 3584 X 3094 pixel resolution imaging
Patterning	Up to 4000 X 4000 pixel resolution patterning
Frame	256 frame average or integration
File Type	TIFF (8-16 bit), JPEG, BMP
EDS (EDAX)	
Energy Dispersed Spectrometer (EDS)	Ultra-high resolution, digital imaging, X-ray mapping
XP Software	Spectra, image, and elemental map collection
Detecting Unit	10-liter dewar EDAX detecting unit provides performance across a broad range of applications and environments; has narrow diameter end cap with a fixed window that separates the internal components and vacuum of the detecting unit from the microscope chamber and is configurable for light element analysis down to lithium