

Technical Data

ORION® PLUS Essential Specifications	
Resolution (Probe Size)	≤ 0.35 nm
Accelerating Voltage	10 kV – 35 kV ± 5 kV
Magnification	100 x – 1,000,000 x
Field of View	1 mm – 100 nm
Probe Current	Range: 1 fA – 100 pA
Ion Source	ALIS Gas Field Ion Source
Process Chamber	Volume 400 mm ³ Base Vacuum 8 x 10 ⁻⁷ Torr Customizable port plate Loadlock: Integrated Plasma Cleaner
Image Detectors	Everhart-Thornley Microchannel Plate Solid-state energy resolving backscattered Helium detector
Sample Stage	5-axis motorized stage, 50 mm travel in X and Y, 12 mm Z, 360°, 0° to 45° tilt
Vacuum System	300 L/sec Mag-Lev turbomolecular pumps backed with oil and particle free roughing pumps
Video Cameras	Two video monitoring cameras – Source View and Chamber View
User Interface	Intel® Quad Core Processor 4GB DDR3 memory Two 160GB hard drives Two 20" flat screen displays