

Veritas-Series Specifications

Model	Veritas-3000	Veritas-3100
Stage Type	5-axis Motorized -X,Y: 120mm(-60mm~60mm) / -Z: 5 ~ 65mm / -T: -20 ~ 90° / -R: 360°	
Vacuum Mode	High Vacuum Mode (9×10^{-3} Pa)	High Vacuum Mode (9×10^{-3} Pa) Low Vacuum Mode (10 ~ 230Pa)
Vacuum System	Fully Automated Evacuation System - Turbo molecular pump - Rotary vane pump - Electrical valve system	
Electron Gun	Precentered Tungsten Filament	
Detector	SE Detector	SE Detector, BSE Detector(Single, Semiconductor)
Resolution	3.0nm (SE Image at 30kV)	
Magnification	X10 ~ X300,000	
Acceleration Voltage	200V ~ 30kV [Maximum Current @30kV : 190uA / Maximum Gun Power : 5.7 Watt]	
Objective IRIS	Variable aperture with different diameters(20/20/50/100μm)	
Image Shift	± 50μm	
Maximum Sample Size	Horizontal: 210mm, Vertical: 65mm	
Advanced Scan Mode	Dynamic Focus, Point & Line Scan, Tilt Compensation	
Working Distance	5~65mm	
Automatic Function	Auto Brightness/Contrast, Auto Focus, Auto Gun Alignment, Auto Saturation, Auto Filament / Bias	
Image Format	JPG, Tiff, BMP, PNG	
Display Mode	Focus Mode : 320x240 pixel, Resizable Preview Mode : 800x600 Slow Mode : Applicable to both preview and focus mode Photo Mode : Up to 3200x2400	
Dimension(mm)	W X D X H = 800mm x 825mm x 1500mm, 200kg	
Supplied Accessories	Factory-centered Filament Cartridge 1box(10units), Specimen Mounts 1box(10units), Tweezer, Carbon Tape, Hex. Driver 0.89mm (1 ea.), Hex. T Wrench 2.5mm (2 ea.)	
Operation device	Windows 8-based All-in-One 20" Workstation -100% controlled by keyboard and mouse	
Optional Devices	Quad BSE detector Chamber Camera LaB6/Cebix upgrade 3D Imaging Raman Spectroscopy EDS(Energy Dispersive Spectroscopy) EBSD(Electron Back Scattered Diffraction) WDS(Wavelength Dispersive Spectroscopy) CL(Cathodoluminescence) E-beam Lithography	
Power Supply	Single Phase : 100 ~ 240VAC, 50/60Hz, 1kVA	



5-Axis Eucentric Stage

Veritas-Series

Big Chamber SEM

High Performance and Productivity

Large Scale Stage Movement



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Big Chamber SEM - Veritas Series

Veritas-series has 5-Axis eucentric motorized stage which provides easier measuring of large samples. Eucentric tilt is essential for 3D reconstruction function.

- Chamber Size
Internal dimensions : 230(W) x 210(D) x 260(H) mm
- Maximum Sample Size
210mm(H), 65mm(V)
- Wide Movement Range
X,Y : 120mm / Z : 5~65mm / T :-20~90° / R : 360°
- Maximum Sample Weight : 2kg



Application

- Large Samples Analysis
Veritas-series can analyze large samples which were unable to do with Genesis-series. ex) Wafer, Disk



- Non-destructive Samples Analysis
Able to analyze samples without cutting
ex) PCB, Semiconductor pattern Analysis



- Heavy Samples Analysis
Able to analyze heavy samples up to 2kg
ex) Rock, Iron Ore



High Performance

Veritas-series provides nano-scale imaging capability up to x300K and various detector options like EDS, EBSD, WDS, CL for various user applications. It also provides charge reduction function and low vacuum capability for biological sample analysis.

Easy-to-use Software

EmCrafts' Virtuoso™ is the most intuitive SEM operation software not only for beginners but also experienced microscopists. Veritas-series provides nano-scale imaging capability up to x300K. Straightforward operations by only keyboard and mouse provide more special user experience.



Easy Maintenance

- Factory-Centered Filament Cartridge
- Filament Burnout Notification
- Precentered Filament : Only 1~2 Minutes are Required for a Filament Replacement
- Remote Diagnostics : Electrical Checkpoints are Probed and Reported



Installation Footprint

