

Technical Data

| Essential Specifications | EVO® MA 10 and LS 10 | EVO® MA 15 and LS 15 | EVO® MA 25 and LS 25 |
|--|---|--|--|
| Resolution | 3 nm (2 nm) @ 30 kV - SE and W (LaB ₆) 4.5 nm @ 30 kV - BSD (VP mode) 15 nm @ 30 kV - 1nA, LaB ₆ 20 nm (15 nm) @ 1 kV - SE and W (LaB ₆) 10 nm @ 3 kV - SE | | |
| Acceleration Voltage | 0.2 - 30kV | | |
| Magnification | < 7 - 1,000,000 x | < 5 - 1,000,000 x | < 5 - 1,000,000 x |
| Field of View | 6 mm at the Analytical Working Distance (AWD) | | |
| X-ray Analysis | 8.5 mm AWD and 35° take-off angle | | |
| OptiBeam®* Modes | Resolution, Depth, Analysis, Field, Fisheye | | |
| Pressure Range | 10 - 400 Pa (MA Series) 10 - 3000 Pa (LS Series) | | |
| Available Detectors | BSD – Multisegment Diode ETSE – Everhart-Thornley Secondary Electron Detector VPSE – Variable Pressure Secondary Electron Detector SCD – Specimen Current Detector | | |
| Chamber | 310 mm (Ø) x 220 mm (h) | 365 mm (Ø) x 275 mm (h) | 420 mm (Ø) x 330 mm (h) |
| 5-Axes Motorised Specimen Stage | X = 80 mm Y = 100 mm Z = 35 mm T = 0 - 90° R = 360° (continuous) Stage control by mouse or optional joystick and control panel | X = 125 mm Y = 125 mm Z = 50 mm T = 0 - 90° R = 360° (continuous) Stage control by mouse or optional joystick and control panel | X = 130 mm Y = 130 mm Z = 50 mm T = 0 - 90° R = 360° (continuous) Stage control by mouse or optional joystick and control panel |
| Maximum Specimen Height | 100 mm | 145 mm | 210 mm |
| Future Assured Upgraded Paths for MA Series | BeamSleeve®, Extended Pressure, Water vapour VP gas | | |
| Image Framestore | 3072 x 2304 pixel, signal acquisition by integrating and averaging | | |
| System Control | SmartSEM*** GUI operated by mouse and keyboard Windows® XP multilingual operating system | | |
| Utility requirements | 100 - 240 V, 50 or 60 Hz single phase, no water cooling requirement | | |
| <i>OptiBeam®* – Active column control for best resolution, best depth of field or best field of view</i> <i>SmartSEM*** – Fifth generation SEM control Graphical User Interface</i> | | | |