



Quanta™ 250 FEG

Discover what a truly high resolution versatile SEM can do

Addressing the need to investigate a wide variety of materials and characterize structure and composition, the FEI Quanta™ FEG provides unmatched flexibility to increase both performance and versatility to handle the challenges of today's wide ranging research needs. View any sample and get all the data: surface images and compositional images can be combined with accessories for determining material properties and elemental composition.

Today's research extends beyond simple metals and coated samples and the Quanta series can comfortably handle challenges to produce top quality images and analysis. The Quanta 50 series from FEI is the advanced, flexible solution for current and future research applications. Featuring three imaging modes – high vacuum, low vacuum and ESEM™, it accommodates the widest range of samples of any SEM system. These instruments are engineered to provide maximum data – imaging and microanalysis – from all specimens, with or without preparation. Characterization of both traditional samples from metals, fractures and polished sections, to non-conductive soft materials.

The Quanta 50 series is the third generation Quanta system built on the success of previous generations of ESEM Schottky FEG. This series has an easy-to-use and flexible user interface with functions to maximize productivity and allow all the data to be collected. Designed by microscopists for microscopists, this instrument series is truly above and beyond 'easy to use'. Navigation features include auto navigation montage, double-click stage-movements, drag-to-zoom and other useful features incorporated as standard. SmartSCAN™ technology is smart scanning strategy to reduce noise and provide better data. Additional new options such as beam deceleration to improve low kV performance, Nav-Cam™ color image navigation, and new retractable detectors provide even greater flexibility to the Quanta FEG series.

Better data. More flexibility. Higher efficiency. General purpose FEG ESEM is now within your reach.

Key benefits

- Only high resolution FEG-SEM with ESEM technology
- Characterize conductive and non-conductive samples with SE and BSE imaging possible in every mode of operation
- Minimize the amount of sample preparation, low vacuum and ESEM capability enables charge-free imaging and analysis of non-conductive and/or hydrated specimens
- Increase analytical capabilities by enabling EDS and EBSD analysis on conductive and non-conductive samples in high and low vacuum thanks to Quanta's patented through-the-lens pumping. Stable high current FEG (up to 200 nA) enable fast, accurate analysis
- Perform dynamic *in situ* analysis of diverse samples in their natural state above or below ambient temperatures from -165 °C to 1500 °C with specialized *in situ* stages
- Enable surface imaging with optional beam deceleration mode to get surface and compositional information from conductive samples
- Easy to use, intuitive software makes highly effective operation possible for novice users