

Electron Microscope

Brand: Opto-Edu

Model: A63.7081, A50.7002

With applications in Textile and composite samples

Resolution: 1.0 nm to 3 nm.

Acceleration voltage range: From 0. 2 kV to 30 kV.

Magnification: From 1 x to a of 3,000,000x.

Adjustable pressure range: Low Vacuum 0-20 Pa 6nm@30kV (BSE)

Optimized probe/tester current: Minimum probe or tester current as low as 1pA~80nA

High vacuum level: 6×10^{-4} , sample

Electron and X-ray detector.

Tungsten emission (by Schottky field Emission Gun) for enhanced resolution and contrast.

Test scenario:

Minimum displacement capacity:

5 Axes Auto Large Stage

Travel Range:

X=150mm, Y=150mm,

Z=60mm,

R=360°, T=-5°~+70°

Touch Alert & Stop Function

Approximate sample dimensions and weight: 10 cm² and 10 g.

24" IPS LCD Monitor

Turbomolecular pump and rotary pump.

Data report generator.

AC 220V 10%, 50Hz 1 Hz, standard sine wave.

Specific control interfaces necessary for device operation, enabling precise control and advanced sample analysis.

Pressure Variable range:

High Vacuum Gun Vacuum: 2×10^{-7} Pa, Chamber Vacuum: 6×10^{-4} Pa,

Low Vacuum 0-20 Pa 6nm@30kV (BSE)

For the sample, Weights and dimensions up to 10 grams and 10 square centimeters are acceptable.

Tungsten beam electron source (by Schottky Field Emission Gun) for higher resolution and contrast

A secondary electron detector for morphological characterization and Topographic; (SE)

A backscattered electron detector for compositional contrast; SDD-type energy-dispersive X-ray spectroscopy detector; EDS software included; Minimum active area of 30 mm².

A secondary electron detector suitable for operation in low vacuum or variable pressure.