

Find information on atoms in nanometer regions



Field-Emission Electron Microscope
JEM-2200FS

The JEM-2200FS is an energy-filter TEM, which offers many new solutions for a wide range of applications.

The JEM-2200FS is a field-emission transmission electron microscope, which incorporates a 200 kV field-emission gun and a new in-column energy filter that is optimally configured for analytical functions.

The JEM-2200FS uses a new rotation-free image-forming optical system, which facilitates comparison of TEM images and diffraction patterns.

It also allows observation of wide-field energy-filtered images, and combined with the optional tomography function, it offers three-dimensional information with a wide field of view having a high contrast.

Features

- New in-column energy filter TEM
- High-brightness, high-stability FEG
- Full digital system for simple integrated operation
- Extensive functions for image processing and computer analysis

JEOL

Serving Advanced Technology

Field-emission electron microscope JEM-2200FS

Main Specifications

Configuration		URP	HRP	HCP
Point-image resolution (UHR configuration)		0.19 nm (200 kV)		
Energy resolution		0.8 eV (FWHM of ZLP)		
Accelerating voltage		Up to 200 kV		
Electron gun		ZrO/W (100) Schottky		
Objective lens	Spherical aberration coefficient (Cs)	0.5 mm	1.0 mm	3.3 mm
	Chromatic aberration coefficient (Cc)	1.1 mm	1.4 mm	3.0 mm
Spectrometer		In-column filter		
Spot size		Down to 0.5 nm in diameter		Down to 4 mm
Magnification		×50 to × 1,500,000	×50 to × 1,200,000	×50 to × 600,000
Camera length		200 to 2,000 mm	250 to 2,500 mm	300 to 3,000 mm
Energy dispersion at the film plane		50 to 300 μm/eV at 200 kV		
EDS*	Solid angle (30/50mm ²)	0.13/0.24 sr	0.13/0.28 sr	0.09/– sr
	Take-off angle (30/50mm ²)	25/22.3°	25/54.1°	20°/–

*Commercially Available Systems

Installation Room

Floor space	5,000 (W) × 5,400 (D) mm or more
Ceiling height	3,200 mm or more (additional height required for installation crane)
Entrance	1,000 (W) × 2,200 (H) mm or more
Temperature	15 to 25 °C



*Specifications subject to change without prior notice.



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