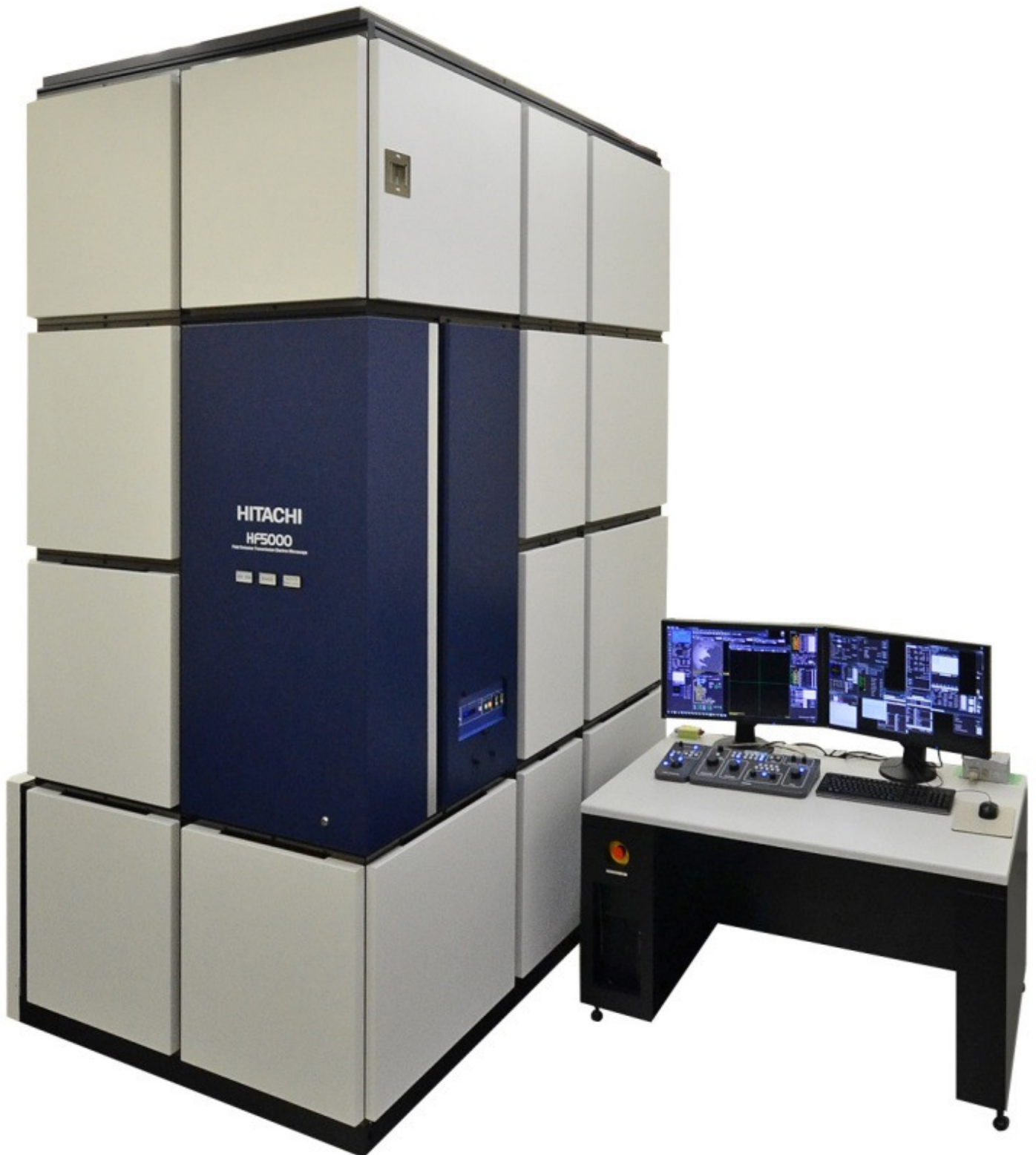


HF5000

Next-generation 200kV aberration corrected TEM/STEM
for atomic resolution imaging & analysis



- ⊗ Hitachi in-house fully self-aligning probe Cs-corrector for high throughput and optimum performance
- ⊗ New high-brightness high-stability cold FEG
- ⊗ High sensitivity dual EDX with >2sr combined solid angle
- ⊗ EELS option
- ⊗ Ultra-stable optics, power supplies and stage
- ⊗ Atomically resolved SE imaging
- ⊗ Lineup of specimen holders, including 360° rotation holder, air-protection holder and Hitachi FIB-compatible holder
- ⊗ Remote operation function
- ⊗ Free camera selection

■ Specifications

Item	Description	
Electron source	W(310) cold field emission electron source	
Accelerating voltage	200 kV (maximum)	
Imaging resolution	STEM	0.078nm (ADF-STEM image)
	TEM Lattice	0.10nm
	Point-to-Point	0.24nm
	Information limit	0.13nm
Magnification	STEM	x20 ~ x4,000,000
	TEM	x100 ~ x1,500,000
Specimen stage	Specimen stage	Eucentric goniometer 5-axis stage
	Specimen size	3mm Φ
	Specimen traverse	X, Y = ± 1.0 mm, Z = ± 0.4 mm
	Specimen tilt	$\alpha = \pm 25^\circ$, $\beta = \pm 35^\circ$ (Hitachi double-tilt specimen holder*1)
Aberration corrector	Hitachi in-house probe-forming spherical aberration corrector (standard equipment)	
Image display	PC & OS	Windows®7 *2 or later
	Monitor	27-inch wide LCD panel (standard monitor, 2 nd monitor*1)
	Camera	Aberration-correction bottom-mount camera(Standard equipment) Screen camera*1 (for viewing fluorescent screen)

■ Installation site conditions

Item	Description	
Room temperature	15~23°C (Temp. Fluctuation: 1°C/h or less)	
Humidity	40~60% RH	
Power	Main unit	Single phase AC200V $\pm 10\%$, 50/60Hz ± 0.5 Hz, 8kVA
	Water recirculator*1*3	Three phase AC200V $\pm 10\%$, 50/60Hz ± 0.5 Hz, 10kVA
	Baking unit	Single phase AC200V $\pm 10\%$, 50/60Hz ± 0.5 Hz, 1.5kVA
Grounding terminal	D-class grounding (ground resistance: 100 Ω or less)	
Cooling water	Flow rate	1.0~2.0L/min (Pressure: 49~196kPa) x 2 systems
	Water temperature	16~18°C (Temp. fluctuation: 1°C/h or less)
Gas	SF ₆	99.9% or higher, Pressure reducing valve: 0~200kPa
	N ₂	99.9% or higher, Pressure reducing valve: 0~500kPa
	Air	0.4~0.6MPa

Before placing an order, please check floor vibration, acoustic noise and magnetic flux in the installation room. Concerning those allowable spec., please consult with our local representatives.

Notes : *1: Option, *2: Windows is a registered trademark of Microsoft Corp.

*3: Specifications and dimension depend on manufacturer, model and configuration.

