






Compare TEM products

HF5000, HD-2700, HT7800, HT7820, HT7830

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Model	Field Emission Transmission Electron Microscope HF5000 	Spherical Aberration Corrected STEM/SEM HD-2700 with Cs corrector 	Field Emission STEM/SEM HD-2700 	Transmission Electron Microscope HT7800 	Transmission Electron Microscope HT7830 
Electron source	W(310) cold field emission electron source	Cold field emitter	Cold field emitter Schottky emitter	Tungsten filament LaB ⁶ filament*	LaB ₆ filament Tungsten filament*
Accelerating voltage	200 kV, 60 kV*	200 kV, 120 kV*, 80 kV*	200 kV, 120 kV*, 80 kV*	120 kV – 20 kV	
Resolution	ADF-STEM image 0.078 nm lattice image 0.102 nm	HAADF-STEM 0.136 nm FFT 0.105 nm	0.204 nm	Lattice 0.20 nm (Off-axis, 100 kV)	Lattice 0.19 nm (On-axis, 120 kV)
Magnification	STEM ×20 – ×8,000,000 TEM ×100 – ×1,500,000	×100 - ×10,000,000		×600,000	×1,000,000
Specimen tilt angle	$\alpha = \pm 25^\circ$, $\beta = \pm 35^\circ$ (Hitachi double-tilt specimen holder*)	$\pm 18^\circ$ (HR lens)	$\pm 30^\circ$ (Std. lens)	$\pm 70^\circ$	$\pm 10^\circ$

*option