






Compare Tabletop Microscope with SEM

TM4000Plus II / FlexSEM 1000 II / SU3800 / SU3900

HITACHI
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Model	Tabletop Microscope TM4000 II 	Tabletop Microscope TM4000Plus II 	Scanning Electron Microscope FlexSEM 1000 II 	Scanning Electron Microscope SU3800 	Scanning Electron Microscope SU3900 	
Magnification	×10 - ×100,000 (Photographic magnification) ×25 - ×250,000 (Monitor display magnification)		6x - 300,000x (on photo) 16x - 800,000x (on display)	5x - 300,000x (on photo) 7x - 800,000x (on display)		
Resolution			4.0 nm at 20 kV (SE, High Vacuum) 15.0 nm at 1 kV (SE, High Vacuum) 5.0 nm at 20 kV (BSE, Low Vacuum)	3.0 nm at 30 kV (SE, High Vacuum) 15.0 nm at 1 kV (SE, High Vacuum) 4.0 nm at 30 kV (BSE, Low Vacuum)		
Electron source	Pre-centered cartridge tungsten filament					
Accelerating voltage	5 kV, 10 kV, 15 kV, 20 kV		0.3 - 20 kV	0.3 - 30 kV		
Image signal	Secondary electron (SE)		Secondary electron (SE)			
	Backscattered electron (BSE)		Backscattered electron (BSE)			
	Mix (BSE + SE)		Mix (BSE + SE)			
	UVD-CL STEM*		UVD-CL* STEM*			
Vacuum mode	Standard Charging reduction	Standard Charging reduction Conductor (BSE only)	6 - 100 Pa	6 - 650 Pa		
Sample stage traverse			3-axis motorized stage		5-axis motorized stage	
	X : 40 mm		X : 0 - 50 mm		X : 0 - 100 mm	
	Y : 35 mm		Y : 0 - 40 mm		Y : 0 - 50 mm	
			Z : 5 - 33 mm		Z : 5 - 65 mm	
	T : -15 - 45* R : 360*		T : -15 - 90°		T : -20 - 90° R : 360°	
Maximum sample size	80 mm (in diameter)		80 mm (in diameter) 153 mm (in diameter)*	200 mm (in diameter)		
Maximum sample thickness	50 mm		40 mm	80 mm		
Signal detector	High-Sensitivity 4-segment BSE detector		SE detector			
	High-Sensitivity Low-Vacuum SE detector		High sensitivity semiconductor BSE detector			
			Ultra Variable-pressure Detector (UVD)*			
Analysis system	Energy Dispersive X-ray Spectrometer (EDS)*			Wavelength dispersive X-ray spectrometry (WDS)*		