



## SPECIFICATIONS

<b>General</b>	<b>Manufacturer Approved</b>	JEOL, Thermo Fisher Scientific				
	<b>Compatibility</b>	EDS; EELS; STEM; Diffraction Patterns; ETEM; Electron Holography; Raman Spectroscopy				
	<b>Holders</b>	TEM / SEM All devices interchangeable				
	<b>Maximum Resolution</b>	0.6 Å				
	<b>Alpha Tilt</b>	Up to $\pm 55^\circ$ (varies by manufacturer and pole piece)				
	<b>Beta Tilt (Double Tilt available)</b>	$\pm 10^\circ$				
<b>Thermal</b>	<b>Temperature Accuracy</b>	< 5%				
	<b>Temperature Stability</b>	< 0.01 °C				
	<b>Temperature Uniformity</b>	> 99.5% across the entire imaging area				
	<b>Temperature Control</b>	Closed loop temperature compensation				
	<b>E-chip Coatings</b>	<b>Silicon Nitride</b>	~40 nm thick			
		<b>Holey Carbon</b>	~18 nm thick			
		<b>None</b>	N/A			
	<b>Heating/Cooling Rate</b>	Any rate up to 1000 °C/ms				
	<b>Maximum Temperature</b>	1200 °C				
	<b>Low Displacement</b>	7 nm after 5 seconds (325 °C $\Delta T$ )				
<b>Ultimate Drift Rate</b>	< 0.5 nm/min					
<b>Electrical</b>	<b>Maximum Current</b>	$\pm 100$ mA, inquire for higher currents				
	<b>Maximum Voltage</b>	55 V, inquire for voltages up to 200 V				
	<b>Maximum Electric Field</b>	Up to 100 kV/cm				
	<b>AC</b>	Low Frequency				
	<b>Number of E-chip Configurations</b>	30				
	<b>Source</b>		<b>Fusion 350</b>		<b>Fusion 500</b>	
			<b>Current</b>	<b>Voltage</b>	<b>Current</b>	<b>Voltage</b>
		<b>Accuracy</b>	$\pm 0.15\% + 100$ nA	$\pm 0.08\% + 500$ $\mu$ V	$\pm 0.15\% + 2$ pA	$\pm 0.02\% + 375$ $\mu$ V
	<b>Measure</b>	<b>Resolution</b>	10 pA	50 $\mu$ V	20 fA	5 $\mu$ V
			<b>Current</b>	<b>Voltage</b>	<b>Current</b>	<b>Voltage</b>
<b>Accuracy</b>		$\pm 0.15\% + 100$ nA	$\pm 0.05\% + 400$ $\mu$ V	$\pm 0.15\% + 750$ fA	$\pm 0.015\% + 225$ $\mu$ V	
<b>Electrothermal</b>	<b>Temperature Accuracy</b>	< 5%				
	<b>Temperature Stability</b>	< 0.01 °C				
	<b>Temperature Uniformity</b>	> 99.5% across the entire imaging area				
	<b>Temperature Control</b>	Closed loop				
	<b>Heating/Cooling Rate</b>	Any rate up to 1000 °C/ms				
	<b>Maximum Temperature</b>	900 °C				

Fusion TEM 200

Fusion TEM 350 / 500

Specifications are dependent on electron microscope and sample.