

# EPS150TESLA Probe Station

This guide contains information to help prepare your facility for the arrival of your EPS150TESLA probe station.



**CAUTION**

*FormFactor requires that the safety interlock is installed prior to use of this equipment. The interlock must be active whenever high voltage is present. Customers are responsible for ensuring proper connection and that the safety interlock is active before use.*




**NOTE**

*Facility requirements for thermal systems are listed separately. See the Facility Planning Guide specific to your thermal system for details.*

## Probe Station Requirements

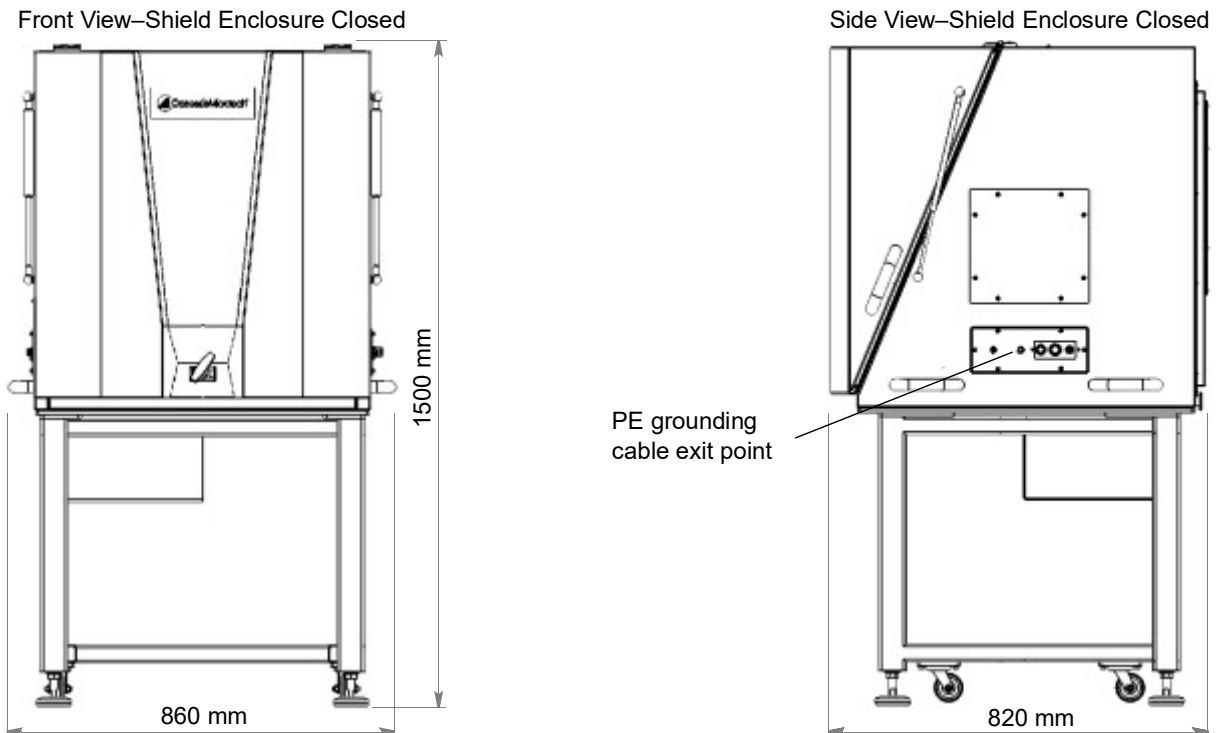
<b>Clean Dry Air (CDA)</b>	General use	<ul style="list-style-type: none"> <li>• ISO 8573.1 Class 1.2.1 (-40°C dew point, oil less than 0.01 mg/m<sup>3</sup>)</li> <li>• 20 l/min (0.7 CFM) at SATP* supplied at 4-6 bar (58 - 87 psi) gage</li> <li>• 8 mm OD push-in tube connection (3 m max tube length)</li> </ul>
<b>Vacuum</b>	<ul style="list-style-type: none"> <li>• Wafer hold on chuck and positioners:                             <ul style="list-style-type: none"> <li>– Required: &lt; 500 mbar (14.8 inHg) absolute, -510 mbar (-15.0 inHg) gage, at up to 3.4 l/min (0.12 CFM) at SATP*</li> <li>– Recommended: &lt; 400 mbar (11.8 inHg) absolute, -610 mbar (-18.0 inHg) gage, at up to 5 l/min (0.18 CFM) at SATP*</li> <li>– 8 mm OD push-in tube connection (3 m max tube length)</li> </ul> </li> <li>• Wafer hold only (while under test to ensure measurement performance):                             <ul style="list-style-type: none"> <li>– Vacuum pressure stability: ± 10 mbar (0.3 inHg)</li> </ul> </li> </ul>	
<b>Power</b>	Probe station	<ul style="list-style-type: none"> <li>• 100-240VAC, 50/60Hz, 50VA (without accessories)</li> <li>• Fixed power connection (N, L, PE). No wall socket plug. System provides power distribution sockets for all connected devices (IEC-60320 C14 sockets and cables with C13 plugs).</li> </ul>
	Accessories	<ul style="list-style-type: none"> <li>• Refer to specific accessory documentation.</li> </ul>
	PE system grounding	<ul style="list-style-type: none"> <li>• PE ground point to connect 1x4 mm<sup>2</sup> cable</li> <li>• Distance to prober ≤ 3 m (cable outlet at left rear of the probe system)</li> </ul>
<b>Thermal Systems</b>	The thermal system connector must be plugged into the dedicated outlet strip provided with the probe station. Refer to the facility preparation guide for your thermal system for further details. Requires thermal system with 208V-240VAC 50/60Hz.	
<b>Environmental Conditions</b>	Operating	<ul style="list-style-type: none"> <li>• Indoors only</li> <li>• Altitude up to 1000 m</li> </ul>
	Temperature	<ul style="list-style-type: none"> <li>• +17°C to +23°C</li> </ul>
	Relative humidity	<ul style="list-style-type: none"> <li>• 20% to 60%</li> </ul>
	Pollution level	<ul style="list-style-type: none"> <li>• 1 (IEC 60664)</li> </ul>
	Clean room class	<ul style="list-style-type: none"> <li>• Class 6 corresponding to DIN EN ISO 14644-1</li> </ul>
	Vibrations	The facility should be free of vibrations caused by other equipment.

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<b>Dimensions</b>	Probe station	• See <a href="#">Dimensions</a> on page 2.	
	Accessories	<ul style="list-style-type: none"> <li>• Iwatsu CT-3100/3200 – requires additional 70 mm in width</li> <li>• Agilent B1505A – requires additional 100 mm in width</li> <li>• Agilent module selector – requires additional 120 mm in depth</li> </ul>	
	Clearance	Front	• 800 mm (32 in.) for operator/installation during installation or service
		Back	<ul style="list-style-type: none"> <li>• 1000 mm (39 in.) for module selector installation/access</li> <li>• 800 mm (32 in.) when using optional holders for monitor, keyboard or test instrument</li> </ul>
		Left/right	<ul style="list-style-type: none"> <li>• 200 mm (8 in.) for wiring, cables, tubing, interlock, etc.</li> <li>• 800 mm (32 in.) during installation or service, or permanently when using optional holders for monitor, keyboard or test instrument</li> </ul>
Top		• 400 mm (16 in.)	
		Additional clearance may be required for thermal system cooling units.	
<b>Weight</b>	Probe station	~150 kg (331 pounds)	
<b>Shipping Dimensions (WxDxH)</b>	Probe station box	• 1000 x 1200 x 1700 mm (39.4 x 47.2 x 66.9 in.)	
		<p><b>NOTE</b></p> <p> A forklift is required for unpacking.</p>	
<b>Shipping Weight</b>	Station and box	• ~250 kg (551 pounds)	

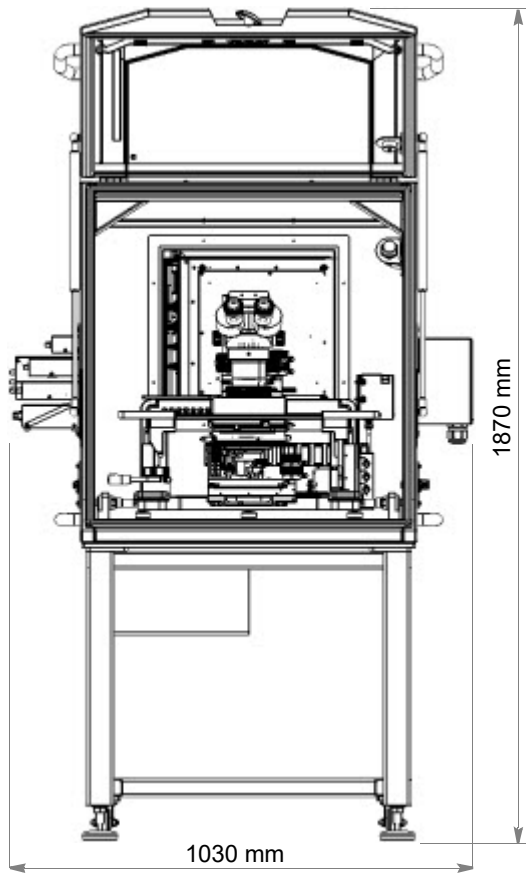
\* Standard Ambient Temperature And Pressure (SATP)

## Dimensions

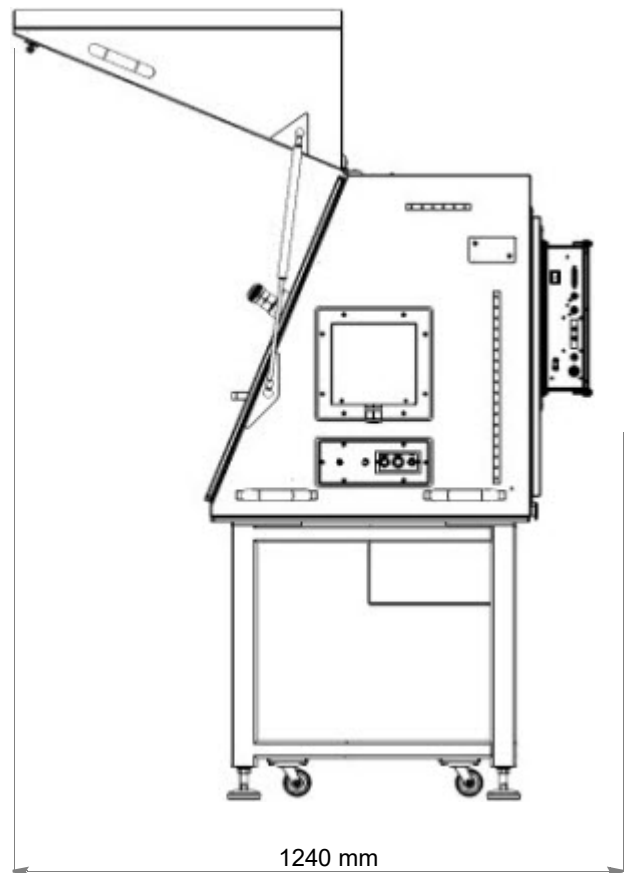


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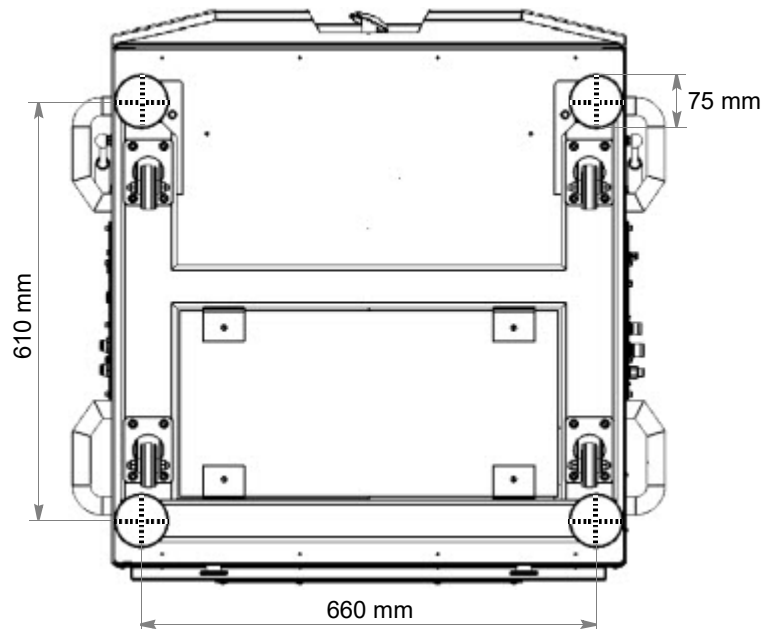
Front View with Accessories—Shield Enclosure Open



Side View with Accessories—Shield Enclosure Open



EPS150TESLA Bottom View



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