

MPS150 Probe Station

This guide contains information to help prepare your facility for the arrival of your MPS150 probe station. The following EPS packages can be configured with the MPS150 probe station:

- EPS150COAX (DC parametric test)
- EPS150TRIAX (Low noise measurements)
- EPS150FA (Failure analysis)
- EPS150RF (RF applications up to 67 GHz)
- EPS150MMW (mmW, THz, and load pull applications)
- EPS150TESLA (see the EPS150TESLA Facility Planning Guide).



NOTE

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

Probe Station Requirements

Clean Dry Air (CDA)	General use	<ul style="list-style-type: none"> • ISO 8573.1 Class 1.3.1 (-20°C dew point, oil less than 0.01 mg/m³) • Flow rate is insignificant supplied at 4-6 bar (58 - 87 psi) gage • 8 mm OD push-in tube connection (3 m max tube length)
		<p>NOTE <i>CDA is not required for stations without pneumatic lift and/or a vibration isolation platform/table</i></p>
Vacuum	<ul style="list-style-type: none"> • Wafer hold on chuck and positioners: <ul style="list-style-type: none"> – Required: < 500 mbar (14.8 inHg) absolute, -510 mbar (-15.0 inHg) gage, at up to 3.4 l/min (0.12 CFM) at SATP* – Recommended: < 400 mbar (11.8 inHg) absolute, -610 mbar (-18.0 inHg) gage, at up to 5 l/min (0.18 CFM) at SATP* – 8 mm OD push-in tube connection (3 m max tube length) • Wafer hold only (while under test to ensure measurement performance): <ul style="list-style-type: none"> – Vacuum pressure stability: ± 10 mbar (0.3 inHg) 	
Power	Probe station	<ul style="list-style-type: none"> • None
	Accessories	<ul style="list-style-type: none"> • 100–240 V AC nominal, 50/60 Hz, 500 VA (depending on accessories and country/region); 100-230V AC nominal, 50/60Hz
Thermal Systems	Refer to the facility preparation guide for your thermal system.	
Environmental Conditions	Ambient temperature	<ul style="list-style-type: none"> • +18°C to +28°C
	Relative humidity	<ul style="list-style-type: none"> • 20% to 60%
	Pollution level	<ul style="list-style-type: none"> • 1 IEC 664
	Clean room class	<ul style="list-style-type: none"> • Class 6 corresponding to DIN EN ISO 14644-1
	Vibrations	The facility should be free of vibrations caused by other equipment.
Additional Equipment	Laser cutter	Laser safety equipment must be in accordance with international laser safety standards.
	Video option	The CCD camera requires a C-mount port, and the monitor requires a table.
	Table	The PC, when equipped with motorized accessories, including optional probe station control software., requires extra space next to the probe station.
	Vibration isolation platform	A stable, rigid table is required. The vibration isolation platform does not change the station footprint.
	Vibration isolation table	For dimensions and points of support, see page 4 .

MPS150 Probe Station

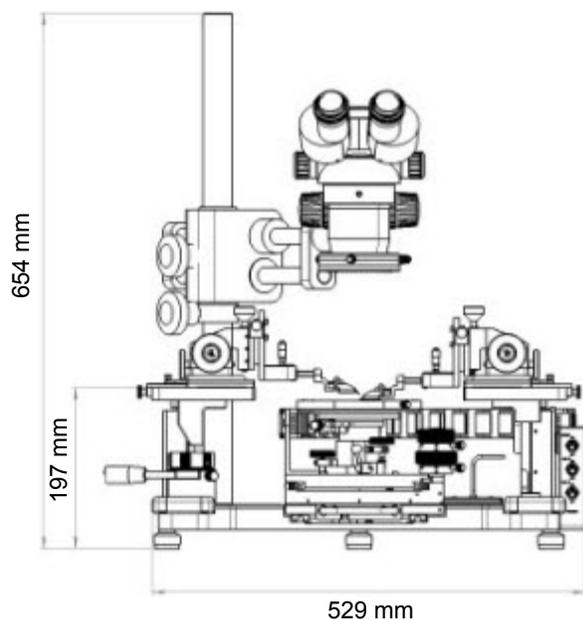
Dimensions (WxDxH)	Probe station	<ul style="list-style-type: none"> • See Dimensions (in mm) on page 2. • Optional accessories such as cameras and laser cutters can increase the total height up to 900 mm.
Weight	Probe station	~60 kg
Shipping Dimensions	Probe station box	• 710 mm x 920 mm x 890 mm
	VIT box	<ul style="list-style-type: none"> • Without dark box: 1000 mm (W) x 1000 mm (D) x 1050 mm (H) • With dark box: 1500 mm (W) x 1400 mm (D) x 1120 mm (H)
Shipping Weight	Probe station box	~100 kg
	VIT box	<ul style="list-style-type: none"> • Without dark box: ~245 kg • With dark box: ~260 kg

* Standard Ambient Temperature And Pressure (SATP)

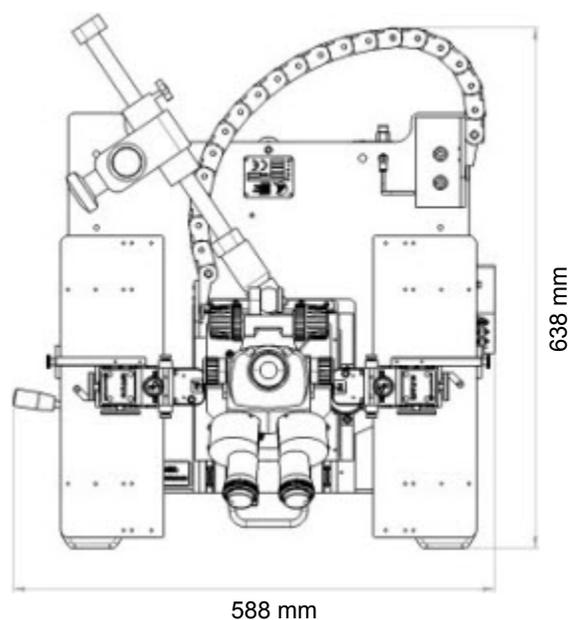
Dimensions (in mm)

MPS150 with Boom Stand

MPS150 with boom stand (front view)



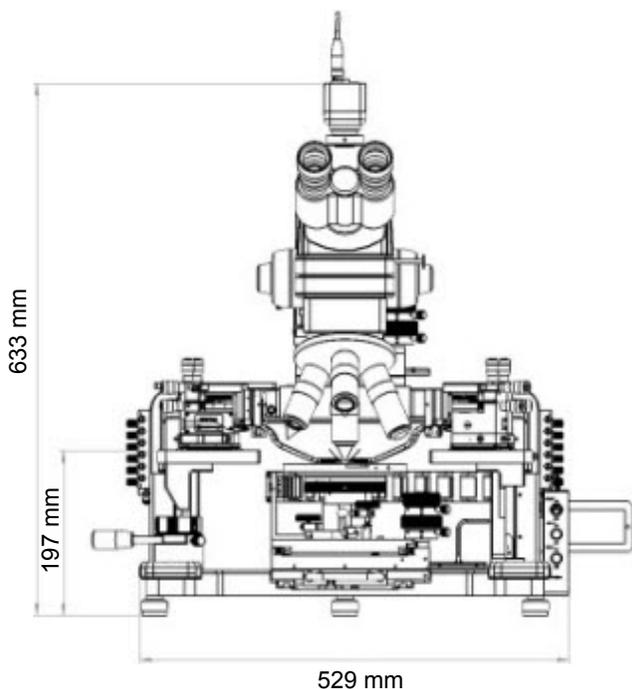
MPS150 with boom stand (top view)



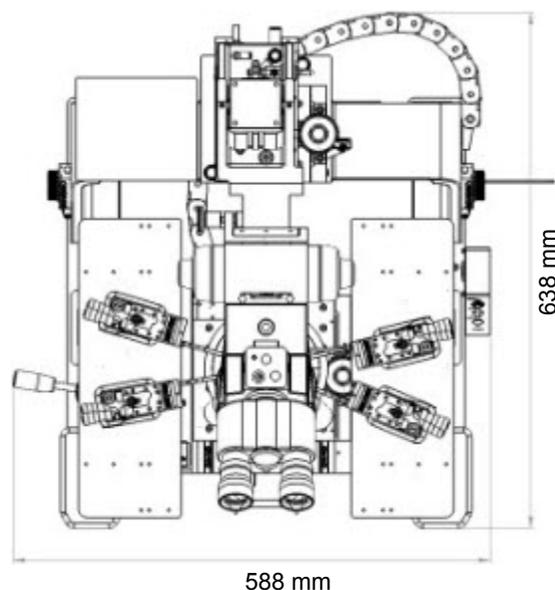
MPS150 Probe Station

MPS150 with Bridge

MPS150 with bridge (front view)



MPS150 with bridge (top view)

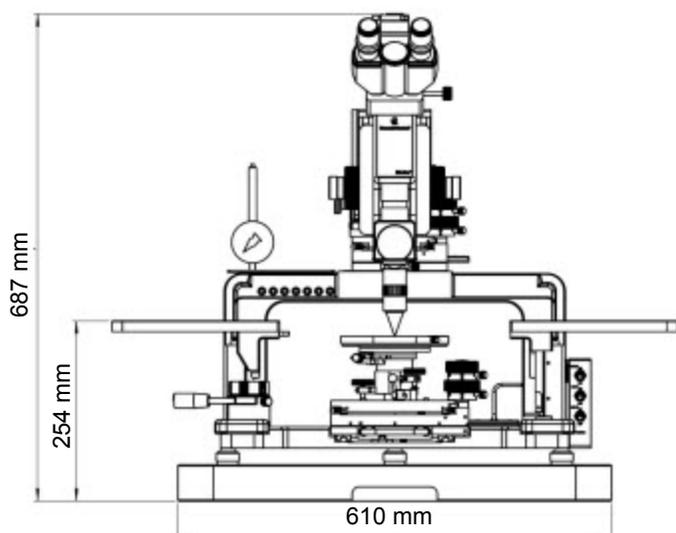


NOTE

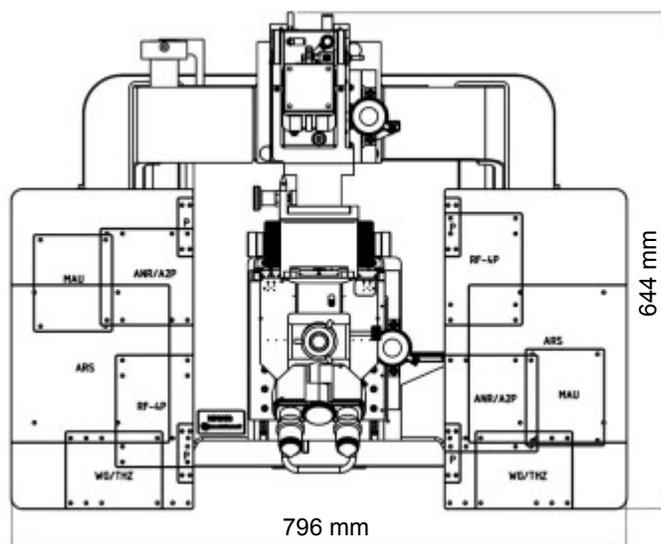
Additional parts (SIGMA kits, mounted modules) might extend beyond the platen, requiring additional clearance.

MPS150MMW

EPS150MMW (front view)

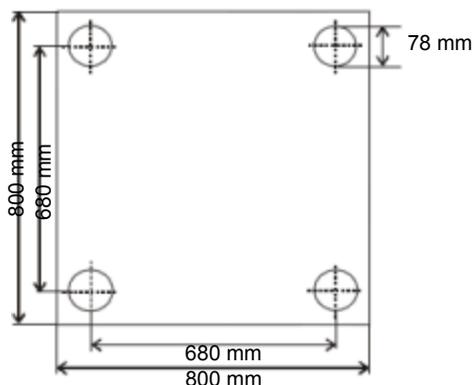


EPS150MMW (top view)



MPS150 Probe Station

Vibration Isolation Table (VIT 801)



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