PM8 Probe Station

Facility Planning Guide

This guide contains information to help prepare your facility for the arrival of your PM8 probe station.

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

Probe Station Requirements

Air and Vacuum	Vacuum		• Less than 200 mbar absolute • Flow rate insignificant • 8 mm (5/16-inch) hose (6 mm and 1/4-inch adapters included)
	Compressed air	Vibration isolation table	• Filtered, dry and oil-free • Minimum 4 bar to 7 bar maximum • 8 mm (5/16-inch) hose (6 mm and 1/4-inch adapters included)
		Scope lift	• 8 mm (5/16-inch) hose (6 mm and 1/4-inch adapters included)
	WARNING *Cascade Microtech does not endorse or recommend using nitrogen instead of CDA for thermal system operation with any Cascade Microtech system due to the risk of oxygen depletion in the working environment.* *If your testing configuration requires the use of nitrogen instead of CDA for MicroChamber or shielded environment purge, time in Quick Purge mode should be controlled. Discuss your setup with your safety and facilities departments to ensure that the oxygen flow in your working environment is adequate to dissipate any nitrogen build up. The use of oxygen sensor alarms is also recommended.*		
Power	Station		• 90–260 VAC, 47–63 Hz, 120VA • IEC 320 C16 input outlet at delivered power supply
	Accessories		• 100–240 V AC nominal, 50/60 Hz (depends on accessories and country/region)
	Fuse for main connector		Ensure that a 10 A lead fuse is available in your facility power line where the main connector is plugged in.
Environmental Conditions	Humidity		• Tool area: 25% to 60% • Support equipment area: 25% to 60%
	Temperature		• Operating range: 19°C to 24°C (66°F to 75°F) • Target temperature: 22°C (72°F)
	NOTE *Keep electronics rack side ventilators and air expellers clear for air circulation.*		
	Pollution level		• 1 (IEC 60664)
	Clean room class		• Class 6 corresponding to DIN EN ISO 14644-1
	Tolerance		• 1K
	Vibrations		The facility should be free of vibrations caused by other equipment.
Additional Equipment	Laser cutter		• Interlock switch is required for swivel lifts
	A200 thermal chuck		• Air cooled (see www.att-systems.com for details)
	SE1000 shield enclosure		• Dimensions (WxDxH): 1000 mm (39.4 in.) x 1220 mm (48.0 in.) x1275 mm (50.2 in.) • Extra space is required for access.
	Table		Extra space next to the probe system is required for the PC when equipped with motorized accessories.
	VIT801 vibration isolation table		For dimensions and points of support, see VIT 801 Vibration Isolation Table on page 7.

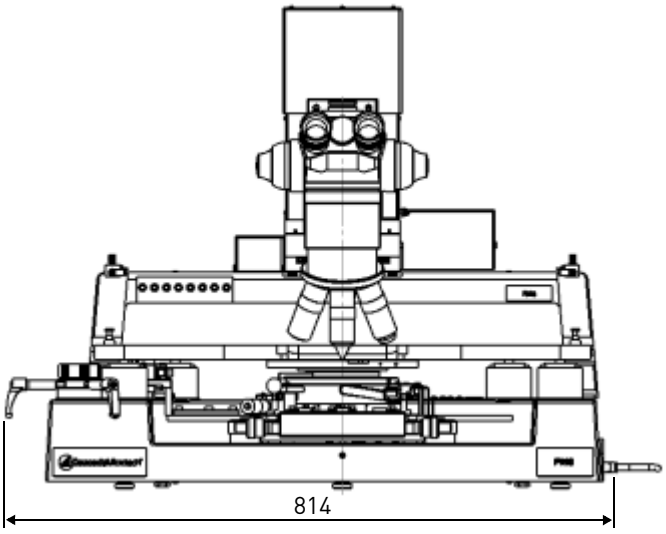
PM8 Probe Station

Dimensions (WxDxH)	Station with fixed bridge	• 814 mm (32.0 in.) x 767 mm (30.2 in.) x 639 mm (25.2 in.)
	Station with movable bridge	• 919 mm (36.2 in.) x 685 mm (27.0 in.) x 646 mm (25.4 in.)
	Station with accessories	Optional accessories such as cameras and laser cutters can increase the total height up to 900 mm (35.4 in.).
Weight	Station with fixed bridge	• 130 kg (287 lb.)
	Station with movable bridge	• 170 kg (375 lb.)
Shipping Dimensions (WxDxH) (approx. values)	Probe station box	• 1250 mm (49.2 in.) x 870 mm (34.2 in.) x 760 or 1160 mm (29.9 or 45.7 in.)
	Accessories box	• 800 mm (31.5 in.) x 1200 mm (47.2 in.) x 800 mm (31.5 in.)
	Vibration isolation table box	• 1000 mm (39.4 in.) x 1000 mm (39.4 in.) x1050 mm (41.3 in.)
		• With dark box adapter: 1500 mm (59.0 in.) x 1400 mm (55.1 in.) x 1120 mm (44.0 in.)
Shipping Weight (approx. gross values)	Probe station box	• 170 or 220 kg (375 or 485 lb.)
	Accessories box	• 120 kg (265 lb.)
	Vibration isolation table box	• With dark box adapter: 245 kg (540 lb.)

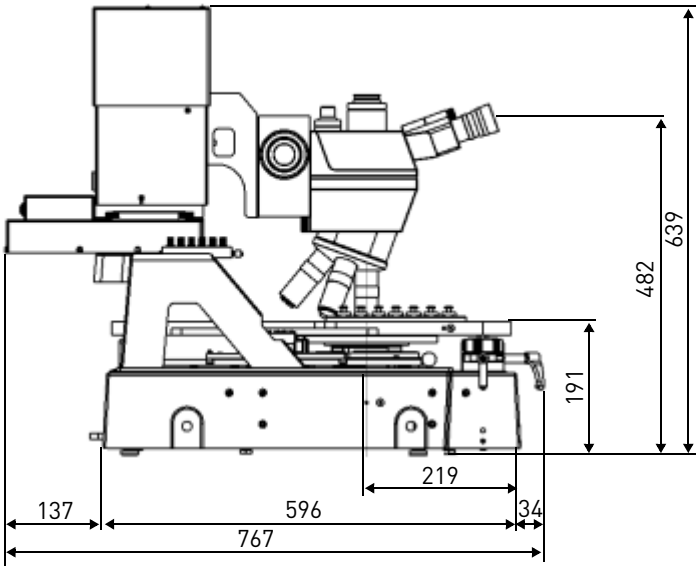
Dimensions (in mm)

PM8 with Fixed Bridge

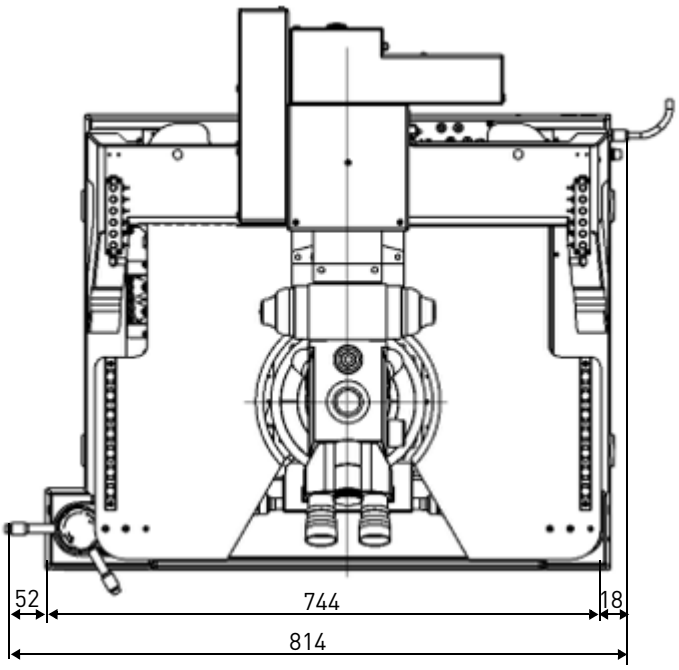
Front view



Side view

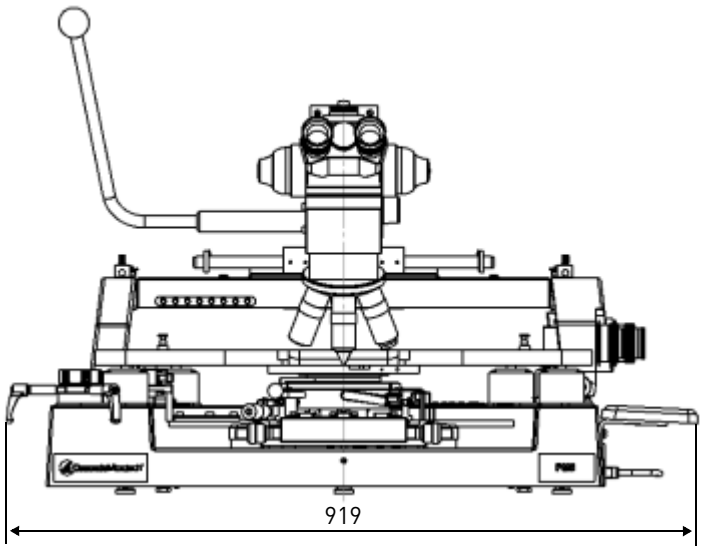


Top view

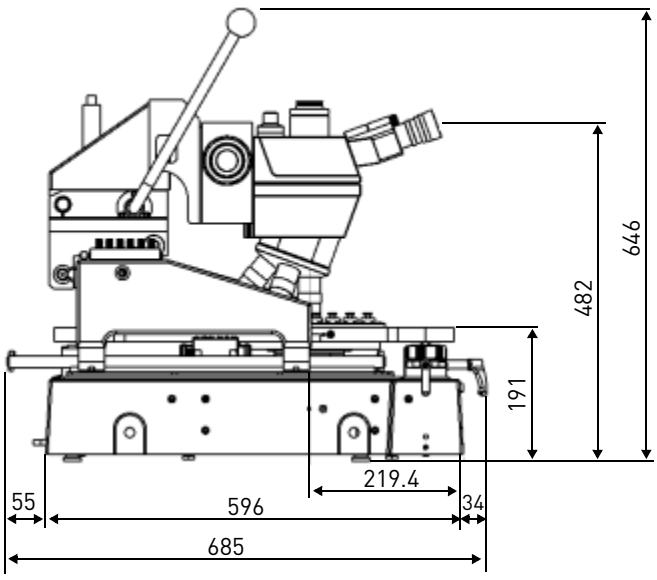


PM8 with Movable Bridge

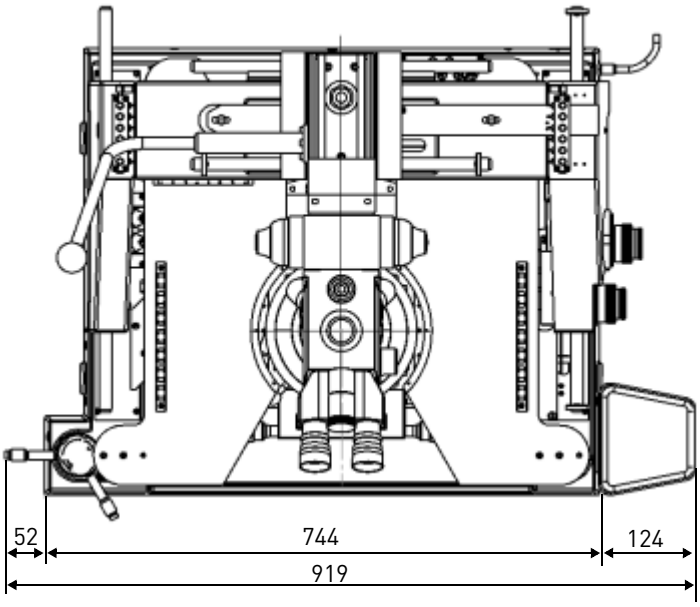
Front view



Side view

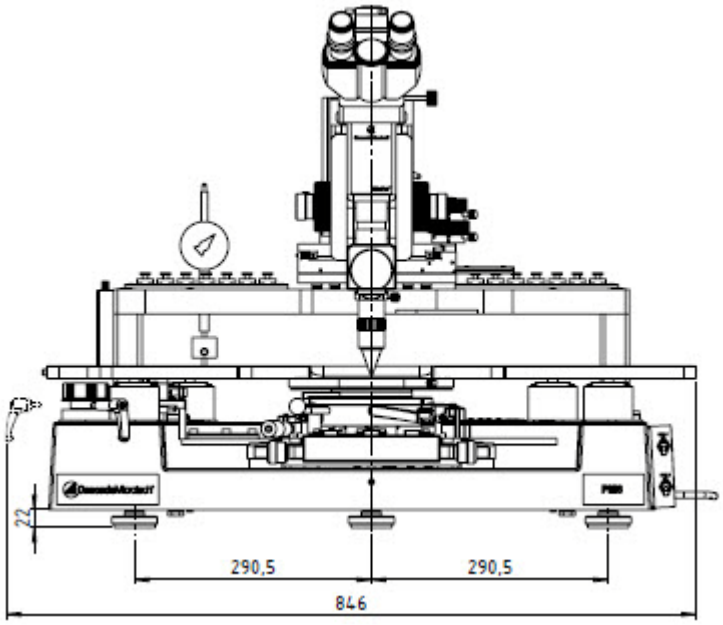


Top view

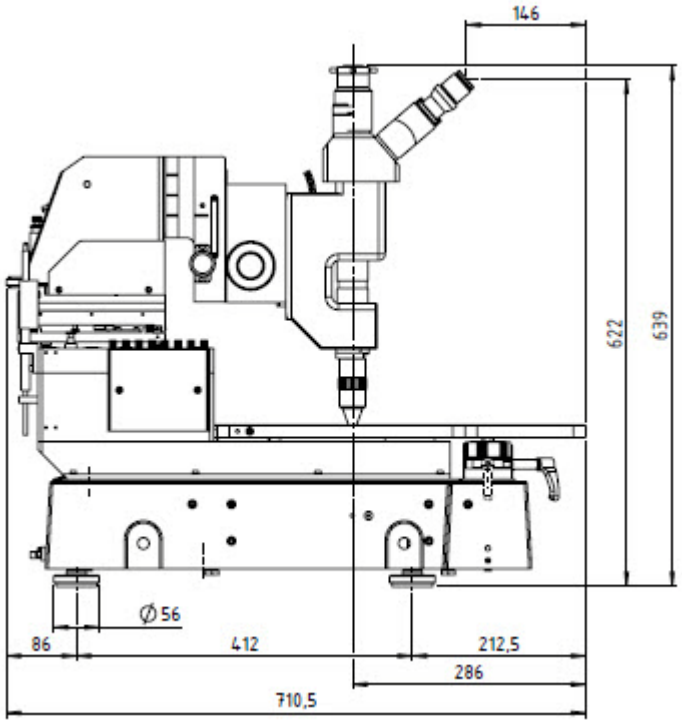


PM8 with MMW Bridge

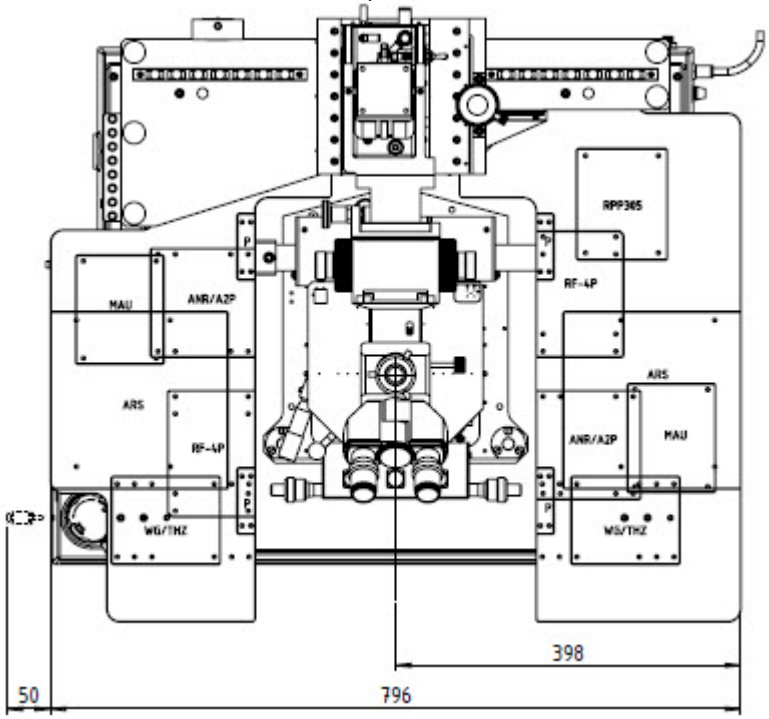
Front view



Side view

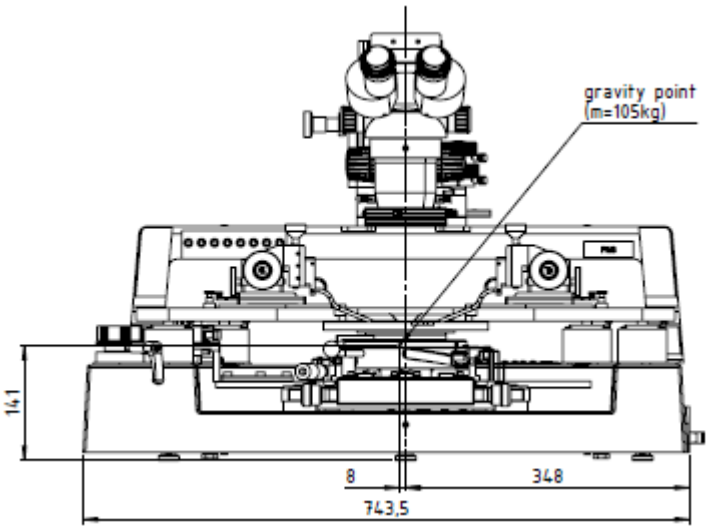


Top view

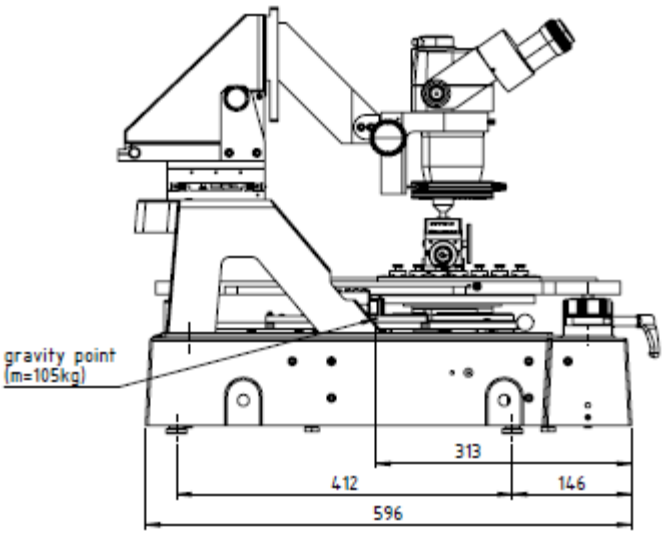


Gravity Points

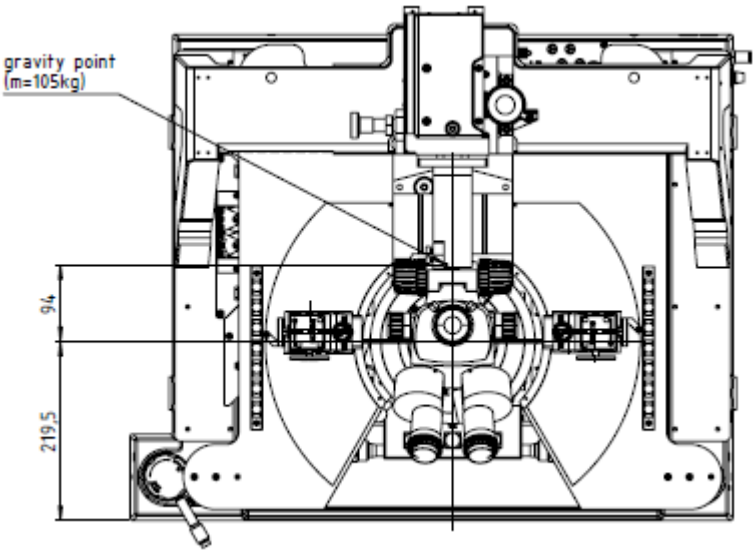
Front view



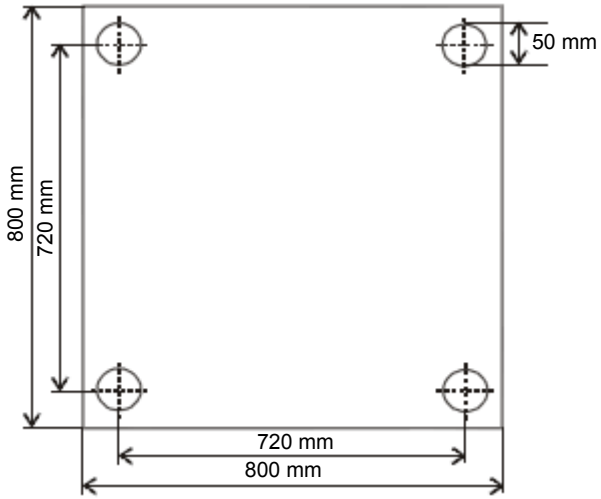
Side view



Top view



VIT 801 Vibration Isolation Table



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