

## 9000 SERIES SPECIFICATIONS

# Specifications

### Introduction

Micromanipulator's 9000 Series, 300mm, analytical probe stations are solid performers. Customers can expect similar performance and specifications when compared to our 8000 Series, 200mm, probers. The 9000 series permit full measurement flexibility including RF and microwave test, low current and low capacitance, wafer level reliability (WLR), above ambient and frost-free cold testing, and test head interface and automation.

### Station Specifications

Station Dimensions:

- 44"x34"x34" (111.7cm x 86.3cm x 86.3cm) DxWxH.

Controller Dimensions (rack mountable):

- 19.7"x17.8"x5.5" (50cm x 45.2cm x 13.9cm) DxWxH.

System weight: 500 lbs. (227 kg).

Stage drive mechanism:

- Leadscrew, closed-loop, microstepper motor.

Stage Travel:

- 12"x12" (304mm x 304mm).

Stage Accuracy/Repeatability/Resolution (XY):

- Accuracy and Repeatability =  $\pm 1.5$  micron.
- Resolution = 0.1 micron.

Platen Accuracy/Repeatability/Resolution (Z):

- Accuracy and Repeatability =  $\pm 1.5$  micron.
- Resolution = 0.1 micron.

XY stage speed (range):

- Standard adjustable range = 0 to 0.750" (19mm)/sec.
- Fast "Q" option = 0 to 3.0" (76mm)/sec.

Z platen speed (range):

- Standard adjustable range = 0 to 0.060" (1.5mm)/sec.
- Fast "Q" option = 0 to 0.200" (5mm)/sec.

Platen drive mechanism:

- Four-point jackscrew.

Platen Travel:

- 2.0" (5.08cm).

Stage Planarity:

Field Adjustable.

### Theta Drive

Theta Drive mechanism:

- Microstepper motor, closed loop.

Theta range:

- 15 degrees ( $\pm 7.5$  degrees).

### Microscope

Microscope drive mechanism:

- Leadscrew Motor Microstepper.

Microscope Travel:

- 4"x4"x8" (100mm x 100mm x 200mm).

Microscope Accuracy/Repeatability/Resolution (XYZ) (-2 option):

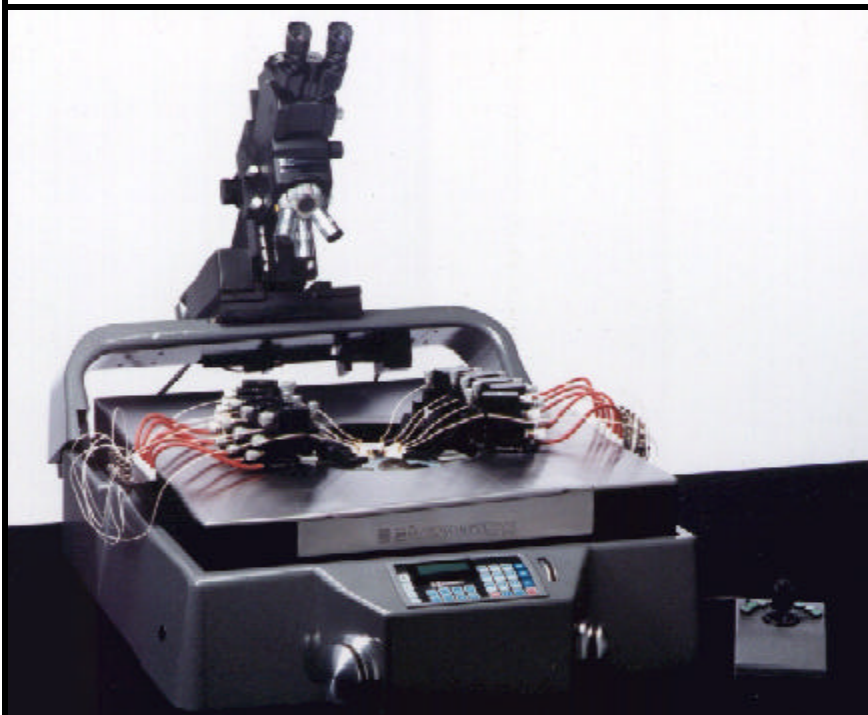
- Accuracy and Repeatability  $\pm 2.5$  micron.
- Resolution = 0.1 micron.

Microscope XY speed (range):

- Standard adjustable range, XY = 0 to 0.450" (11mm)/sec.
- Fast "Q" option = 0 to 0.750" (19mm)/sec.
- Microscope Z speed = 0 to 0.200" (5mm)/sec.

### Facility requirements

- 115/230 VAC.
- 50/60 Hz, 6.3A
- 40-60 PSI CDA (for lift pin operation).
- 25hg vacuum nominal.



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Specifications subject to change without notice.