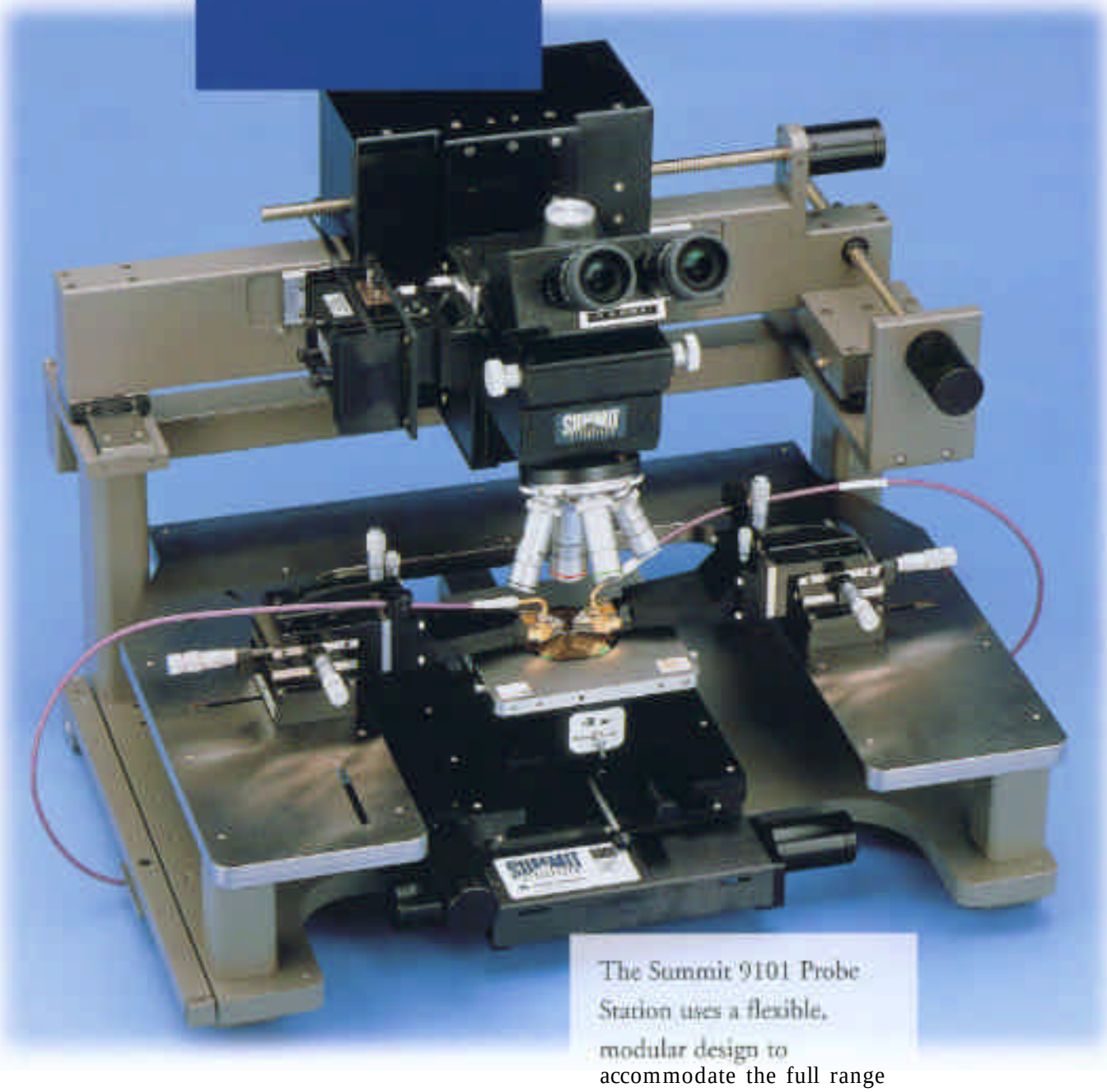
Summit 9101 6-inch Manual Probe Station



The Summit 9101 Probe Station uses a flexible, modular design to accommodate the full range of Cascade's microwave and digital microprobing tools. It is specifically designed for high-frequency device and circuit characterization, and high-speed interconnect, package, and device testing.

CASCADE™ MICROTECH

Features

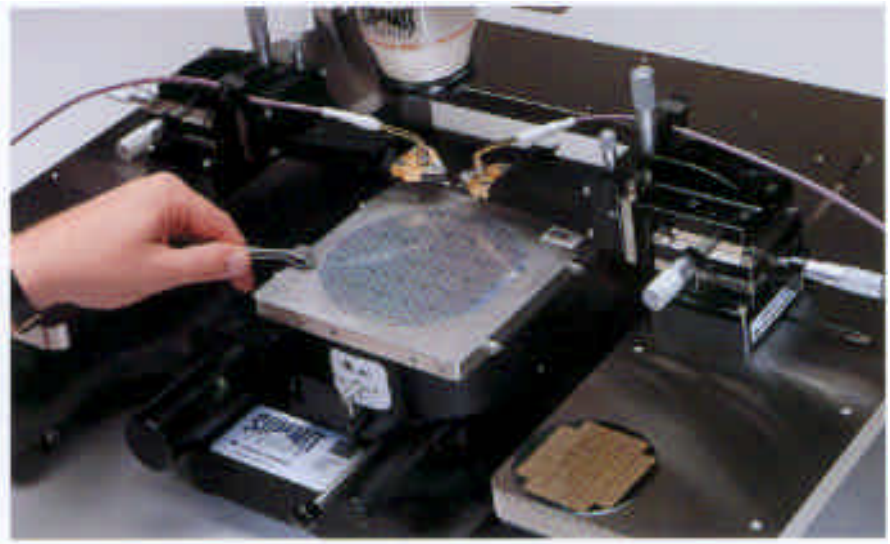
- Fast, precise movement between test sites with orthogonal 152 mm (6-in.) x-y stage translation and linear z-lift
- Quickly calibrate and measure using the unique square chuck -- holds ISS, contact substrate, and wafer simultaneously
- Probe shards and entire wafers on the same chuck top with 1.27 cm (0.5 in.) to 15.24 cm (6 in.) adjustable vacuum
- No vacuum rings -- prevents breakage of thin substrates and ensures no resonant structures below 325 GHz
- 6 x 6 microscope translation
- Up to 4 fix-mount microwave positioners allow full-quadrant probing with up to 152 mm (6 in.) probe separation
- Threaded holes for chuck-mounted accessories
- Micron positioning of the HP 8510XF 110 GHz test heads

Benefits

- Planarizable probe mounts provide even pressure and good contacts to uneven devices
- Slide-mount positioners ensure a broad range of test capabilities
- Positioner-mounted cable clamps eliminate cable-induced strain and vibrations
- Easily reconfigured to accept future microprobing tools for greater accuracy and performance
- Modular configurations allow you to choose the right solution for you



The HP mmW test heads integrate easily on the Summit 9101 Probe Station.



The Summit 9101's unique square chuck with independent vacuum control holds an ISS, contact substrate, and test wafer simultaneously. The station's rollout stage protects your valuable wafers.

- Ergonomic design, sit-down operation, and easy-access controls makes probe station easy to operate
- Rollout stage protects wafers

Applications

- Accurate high-frequency transistor measurements for device modeling
- Package and interconnect probing
- Hybrid probing, thermal analysis
- Electra-optic device probing
- Large substrate characterization
- Back plane impedance characterization
- Design engineering
- Production test, reliability testing
- Incoming inspection

Specifications

X-Y stage

Travel: 152 mm x 152 mm (6 in. x 6 in.)
Bearings: crossroller
Resolution: 5 mm (0.2 in.) per turn
Rollout stage travel: 10 cm 3.9 in.)

Wafer Chuck

Size: 152 mm x 152 mm (6 in. x 6 in.)
Flatness: 10 µm (0.39 mils) across total surface
Material: nickel plated aluminum
Isolation: > 100 MΩ
Breakdown bias voltage: >500 V

In-Depth Specifications

Refer to the *Technical Specifications for Cascade Microtech Probe Stations.*

Facility Requirements

Chuck vacuum:
400 mm (15 in.) Hg. min.

Dimensions

Station: 46 cm (18 in.) D x 61 cm (24 in.) W
Typical height to eyepieces: 48 cm (19 in.)
Net weight: 68 kg (152 lb.), shipping: 80 kg (175 lb.)
Package weight (including crate): 136.2 kg (300 lb.)
Crate dimensions: 99.6 cm (39 in.) W x 76.2 cm (30 in.) D, 85.09 cm (33.5 in.) H

Accessories

Refer to the *Configuration Guide* for compatible accessories,

Ordering Information

6 in. Manual Probe Station.....S9101

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