



MICROWAVE LABORATORY MICROPROBING STATION

Features

- Compact test benchtop size
- RF/Microwave application driven design
 - Stereo zoom microscope 7-30X
 - Precision ball bearing XYZ Positioners with RF probe mount
 - X-Y stage with z-lift chuck
 - Isolated Shielded Vacuum chuck
 - Included vacuum pump
- Stable and rugged for years of consistent repeatable measurements
- Spacious accessory platen for additional (optional) magnetic mount positioners
- Laboratory test station includes storage container.

Benefits

- Very low cost microwave laboratory microprobing test station
- Rugged intuitive for rapid and easy setup
- Precision and feature rich enough for professional research
- Compact size conserves bench space
- Storage container protects between research experiments or lab classes

Applications

- Research Probe Station
 - Semiconductor
 - Materials
 - Passive Structures
- Test fixture for prototype MMIC and MIC components
- Test fixture for small lot production microwave components
- Dedicated test fixture

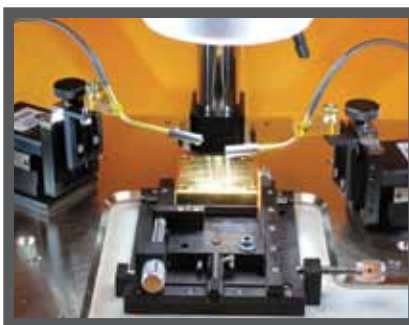
Description

A basic rugged RF (and DC) probe station for the research of advanced active and passive components. Useful for educational training of university students in the discipline of microwave and DC microprobing. Compatible with magnetic mount ball bearing microprobing positioners. Positioners compatible with DC, AC & RF microprobes. Binocular and

Trinocular stereo zoom microscope with 7-30X magnification (included wide field eyepieces), LED ring illuminator, precision x-y stage with isolated and shielded chuck, vacuum hold down and Z-lift. Vacuum Pump included. Basic probe environment with professional features. Test device movement is independent of probe positioning function for ease of operation.

Specifications

- Overall Size
 - depth: 12.0 in.
 - width: 12.5 in.
- Weight (with positioners) 20 lb.
- Chuck size 2.0 in. sq.
- Stage movement
 - X-Y: 1.0 in
 - Z-lift: 0.08 in.
- Platen
 - 7" X 12"
 - Ni plated steel surrounding stage
- Binocular Stereo zoom Microscope
 - 7-30X
 - 4" Working distance
- LED ring illuminator Variable Intensity
- Positioner movement X-Y-Z: 0.50 in.
- Vacuum Pump Vacuum 13" Hg



Stage

The LMS-2709 features a rugged ball bearing stage with 1" of X-Y travel to offer ease of calibration and movement from test device to device in rows or columns. Vacuum clamping and 0.08" 'Z-lift' offer professional functionality for microprobing labs. Useful for the test of passive and active devices. Optional rotating chuck. Shielded Low Noise Chuck

LMS-2709

Probe Positioners -

J microTechnology offers a ruggedized three axis positioners specifically for the LMS-2709. These positioners have 0.5 in. of adjustment in both 'X' and 'Y' and 'Z' axis. They are general purpose ball bearing 40 tpi positioners for both 'DC' and microwave/radio frequency measurements. Positioners are magnetic base mounted to the base platten. Z-axis has a captured Z feature to minimize accidental movement probe damage.



Probe Positioners are supplied with RF Probe mounts(three hole), compatible with GGB, Industries or other microwave probes. Probe mounts have 1+” of 'z' height adjustment in addition to the 0.5” of fine adjustment. GGB Model 7 and Model 10 probes(Style 80)are directly compatible. Optional DC needle holders with tungsten and Paliney7™ needles are available for these positioners.

Optics Package

Optical package include a moveable, left/right with adjustable height, boom stand mounted variable zoom binocular or trinocular stereo microscope. Dimmable LED ring illuminator supplies shadow free light. Microscope is directly mounted to the base plate, centered on the movable chuck stage. LED light is mounted to the objective ring.



Standard objectives are 0.7-3X. Eyepieces are 10XWF(wide field) offering 7-30X. The two magnifications settings supply both a general test sample view and a detailed view of probe pad areas for probe placement accuracy required to make repeatable 40+ GHz measurements or position needles on small contact pads. Working distance is 4.0”. Optional NAT-09Tx trinocular stereo zoom microscope with an added camera video port. Optional 25XWF eyepieces for inspection capability. Optional Stereo zoom microscopes.

RF Microprobes

The LMS-2709 is compatible with industry standard microprobes. GGB Industries, Inc. DC, active and microwave probes are compatible with the LMS-2709. Up to four orthangonal probes can be used in test.



Convenient Storage/Shipping Container



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Ordering Information

SUGGESTED LMS-2709 package configuration is the following:

Lab Microprobe Station

LMS-27, Base with stage

KRN-09S, RF Positioner (2 ea.)

NAT-09Bx, Stereo 7-30X μ scope

VA-1, Vacuum Pump(115 V), 13”Hg

Options:

KRN-NM, Needle Holder & Needles

NAT-09Tx, Trinocular 7-30X μ scope

NAT-27, Stereo zoom μ scope

GGB Probes, ECP18-GSG-150-DP
(2 ea.)