EPS150RF

A dedicated 150 mm manual probing solution for RF applications

BENEFITS

Make everyone an RF expert
Best-known methods for highest measurement accuracy

Ensure calibration accuracy
WinCal XE – the only RF on-wafer calibration software

Enable testing of cutting-edge technologies
Ability to probe small RF pads

Protect your investment for the future
Re-configure and upgrade as requirements grow

Minimize training efforts
Designed for convenience and ease of use

The EPS150RF is a dedicated probing solution that comes with everything you need to achieve accurate measurement results in the shortest time, with maximum confidence. The system incorporates best-known methods for RF probing up to 67 GHz, with the ability to probe pads as small as 25 µm x 35 µm and beyond.

The EPS150RF allows you to achieve accuracy through a very stable system platform design with a vibration-isolation solution to protect contact quality over measurement time. Optimized optics, backlash-free X-Y-Z movement of RF positioners, and a contact separation drive with 1 µm repeatability, enable precise probe placement and contact repeatability comparable to semi-automatic systems. Industry-benchmark cables support the highest magnitude and phase stability of measurements. Choose a pair of 40, 50, or 67 GHz RF probes from our Infinity Probe®, |Z| Probe®, ACP and FPC probe families for the best contact performance. With WinCal XE™ software, you receive patented LRRM and LRM+ methods for the best calibration accuracy. Verified standards and optimized calibration boundary conditions allow you to achieve a repeatable metrological level of calibration and confidence in your measurement results.

An intuitive operation workflow with pull-out chuck, contact gauge, positioner adjustment rails, integrated auxiliary chuck, supported by WinCal XE wizards and tutorials, ensures ease of operation for both the novice and the expert user.

Designed for upgradability with multiple options, the EPS150RF can be easily reconfigured to meet your future project requirements.

Microtron®
Flexible electronic solutions

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EPS150RF

Trinocular 6.7x stereo zoom microscope with 150x magnification
- Accurate probe placement on small pads
- C-mount included
- LED illumination for excellent image contrast and long lifetime

ACP Probes, FPC Probes, Infinity Probes or |Z| Probes
- Your choice of pad material optimized probes

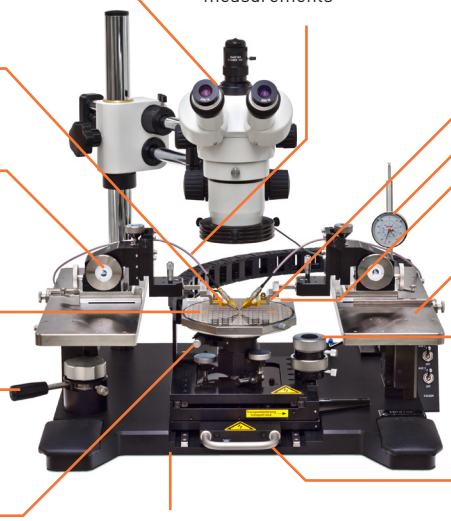
Industry-standard RF positioners
- Consistent contact force and overtravel
- Integrated rails for easy and safe setup

Dedicated RF chuck
- < ±3 µm chuck planarity
- Consistent measurement boundary conditions and overtravel over entire wafer

Unique 200 µm platen contact/ separation stroke
- < ±1 µm accuracy for repeatable contact
- Convenient and easy to use

Fine theta adjustment
- Precise probe-to-pad alignment

High-quality industry-benchmark cables
- Long lifetime
- Consistent calibration and measurements



Vibration-isolation solution
- Ensures accurate contact and minimizes pad damage

Innovative ceramic AUX chuck
- Optimized calibration conditions

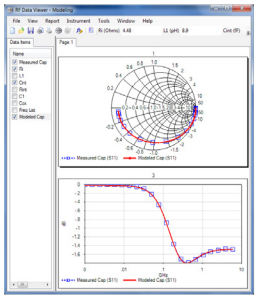
Contact height gauge
- Precise overtravel adjustment
- Reliable and repeatable contact quality

Verified calibration standards
- Accurate calibration, verification and measurement assurance

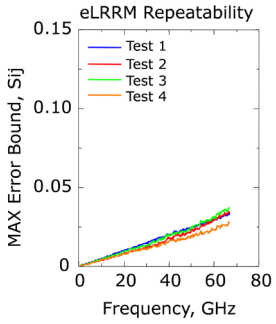
Tailored RF platen with 40 mm travel range
- Rigid and stable design
- Ready for four-port upgrade
- Flexibility for wafer-and package-level test

Chuck X/Y movement
- Precise X/Y positioning with < 5 µm resolution
- Independent axis locks for easy linear navigation

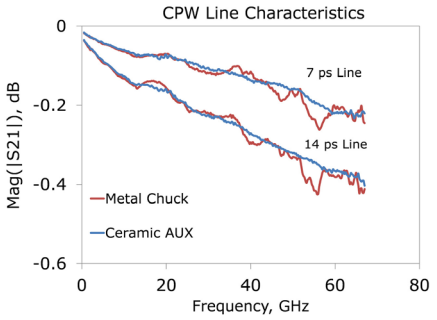
Chuck stage with 90 mm roll out
- Quick, risk-free and convenient wafer loading



Modeling tool screen in WinCal XE software



Highly-repeatable LRRM calibration algorithm available from WinCal XE



Optimal boundary conditions due to integrated ceramic AUX chuck

ORDERING INFORMATION

Part Number	Description
EPS150RF	150 mm manual probing solution* for RF applications
EPS150RF-LT	150 mm manual probing solution for RF applications, excluding cables, probes and calibration substrate
EPS-ACC-150MMW-4P	4-port option for EPS150RF and EPS150MMW packages, containing two RPP210 positioners
EPS-UG-150CXR-HR	Optional replacement of boom stand and stereo microscope with a microscope bridge, 50 mm x 50 mm scope movement, pneumatic lift, scope adapter and SlimVue™ microscope (including 5x objective lens)

* The EPS150RF manual probing solution includes: MPS150 probe station with a 150 mm chuck stage, a tailored RF platen with positioner rails, contact height gauge, scope boom-stand, stereo zoom microscope with 150x magnification and LED ring-light (camera-ready C-mount), vibration-isolation solution, special 150 mm RF chuck with ceramic AUX inlay, fine theta adjustment, two RPP210 magnet-based positioners, full WinCal XE license, choice of two flexible Gore cables (67 GHz /90 cm, 50 GHz / 120 cm or 40 GHz / 120 cm), two 2.4(f) - 2.92(m) adapters, ProbePolish and contact substrate, probe cleaning brush, accessories set, tweezers, choice of two RF single-ended ACP Probes, FPC probes, |Z| probes or Infinity probes at 40, 50 or 67 GHz, with one matching calibration substrate (ISS or CSR). The FPC probes require two adapters (P/N 104-913).

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