Cascade EPS200RF

A complete 200 mm manual probing solution for RF applications up to 67 GHz

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 smallest RF pads and lowest pitches

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

Minimize training efforts
Designed for convenience and ease of use

The EPS200RF is a dedicated advanced 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.

A very rigid and stable system design of the EPS200RF, with cast frame and single platen with four-point support, allows you to achieve high accuracy. An integrated vibration-isolation solution protects contact quality over measurement time. Optimized optics, backlash-free X-Y-Z movement of RF positioners, and a contact separation drive with outstanding 1 µm repeatability, enable precise probe placement and contact repeatability comparable to semi-automated 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 the innovative fine-glide chuck stage which offers both wide-range coarse movement and µm-level fine movement, contact gauge, integrated auxiliary chuck supported by WinCal XE wizards and tutorials, ensures ease of operation and short time to data for both the novice and the expert user.

Designed for upgradability with multiple options, the EPS200RF can be easily reconfigured to meet your future project requirements.

FormFactor™

EPS200RF

Contact height gauge
- Precise overtravel adjustment
- Reliable and repeatablecontact quality

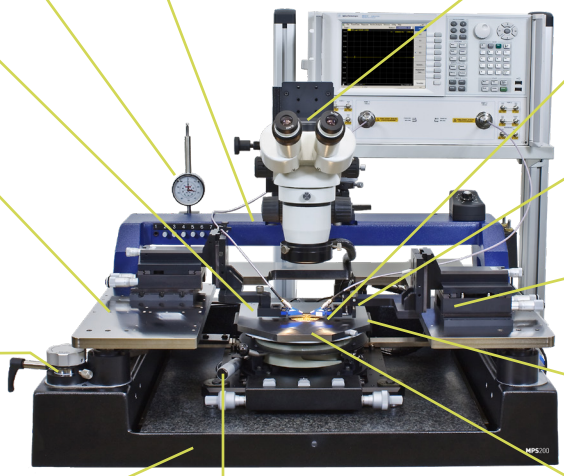
Unique chuck stage
- Quick coarse Y/X movement and sub-micron positioning
- X/Y stepping with independent axes lock

Tailored RF platen and 40 mm platen drive
- Precise mount of up to four positioners
- Flexibility for wafer-level and package test

Unique 400 µm platen contact/separation drive
- Highest contact accuracy and consistency over entire wafer
- Convenience and ease of use

Vibration isolation solution
- Stabilizes contact and minimizes pad damage

High-quality industry benchmark 67 GHz cables
- Long lifetime and consistent measurements



Fine Theta adjustment
- Precise probe-to-pad alignment for small pads

Trinocular 6.7x stereo zoom scope with 20x eyepiece
- Optimized field of view
- Accurate probe placement on small pads
- Camera-ready

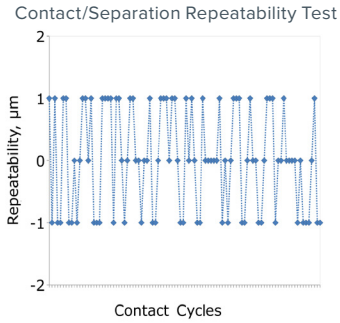
Dedicated RF chuck
- Consistent measurement boundary conditions over entire wafer

Unique ceramic AUX site
- Homogeneous and optimized calibration conditions

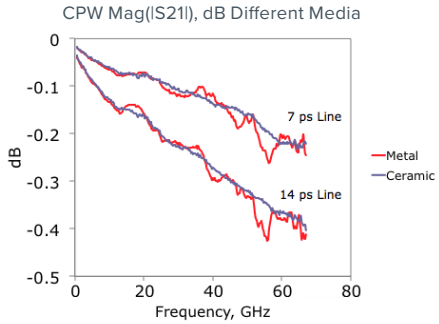
Solid and stable positioners
- Accurate probe positioning, consistent contact force and overtravel

Verified calibration standards
- Accurate calibration, verification and measurement assurance

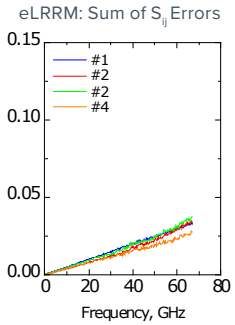
ACP Probes, FPC Probes, Infinity Probes or |Z| Probes
- Your choice of application-optimized probes for best measurement accuracy*



Consistent contact/separation movement



Optimal boundary conditions due to integrated ceramic AUX chuck



Highly repeatable LRRM calibration available from WinCalXE (included in package)

Ordering Information

Part Number	Description
EPS200RF	200 mm manual probing solution* for RF applications
EPS200RF-LT	200 mm manual probing solution for RF applications, excluding cables, probes and calibration substrate
EPS-ACC-200RF-4P	4-port option for EPS200RF package containing two RPP305 positioners and two N/S RF arms

* The EPS200RF manual probing solution includes: PM8 probe station with a 200 mm chuck stage, a tailored RF platen, contact height gauge, cast microscope bridge with 50 x 50 mm scope movement with tilt, stereo zoom microscope with 150x magnification and LED ring-light (camera-ready C-mount), vibration-isolation solution, special 200 mm RF chuck with ceramic AUX inlay, fine theta adjustment, two RPP305 bolt-down 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, 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), and tools for operation and facility connection. The FPC probes require two adapters (P/N 104-913). Does not include instrument rack.