

EPS150MMW

A dedicated 150 mm manual probing solution for mmW, THz and load pull applications



BENEFITS

Make everyone an RF expert

Best-known methods for highest measurement accuracy up to THz

Ensure calibration accuracy

WinCal XE – the only RF on-wafer calibration software

Increase dynamic range and directivity

Shortest signal path from instrument to device

Protect your investment for the future

Re-configure and upgrade as requirements grow

Minimize training efforts

Designed for convenience and ease of use

The EPS150MMW 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 probing up to THz frequencies.

The EPS150MMW allows you to achieve accuracy through a very stable system platform design with a vibration-isolation table to protect contact quality over measurement time.

Accurate mmW measurements demand the shortest signal path to the device under test. The EPS150MMW supports this requirement without compromising electrical accuracy or mechanical stability. The unique SIGMA™ options seamlessly integrate mmW heads and load pull tuners from leading measurement instrument suppliers, enabling the highest dynamic range and directivity. In addition, a specially-designed SlimVUE™ microscope mitigates mechanical interference for high-magnification optics required for probing small pads.

The backlash-free X-Y-Z movement of mmW and RF positioners, integrated platform planarization, and a contact separation drive with 1 μm repeatability, enable precise probe placement and contact repeatability comparable to semi-automatic systems. With the full WinCal XE™ software license you receive patented LRRM, LRM+ and NIST-style multi-line TRL methods for the best possible on-wafer calibration accuracy, up to THz range. Verified standards and optimized calibration boundary conditions allow you to achieve a highly repeatable metrological level of calibration and confidence in your measurement results.

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

Designed for upgradeability and extendable with multiple options, the EPS150MMW system can be easily reconfigured to meet your future project requirements.

EPS150MMW

SlimVUE microscope with C-mount

- Dedicated design to reduce the signal path
- Accurate probe placement on small pads

Quick scope height adjustment

- Easy re-configuration for load pull and sub-THz applications

Probe crash protector

- Risk-free probe change-over

Tailored mmW platen and 40 mm travel range

- Ready for broadband, mmW, THz and load pull applications
- Easy system re-configuration and upgrade

Unique 200 μ m platen contact/separation stroke

- $< \pm 1 \mu$ m accuracy for repeatable contact quality
- Convenient and easy to use

Fine theta adjustment

- Precise probe-to-pad alignment

Chuck stage with 90 mm roll out

- Quick, risk-free and convenient wafer loading

Contact height gauge

- Precise overtravel adjustment
- Feedback on the on the contact position

Dedicated SIGMA options

- Broadband 110 GHz, banded mmW, THz and load pull applications
- Platform tilt for precise probe planarization

Innovative ceramic AUX chuck

- Optimized calibration conditions

Dedicated RF chuck

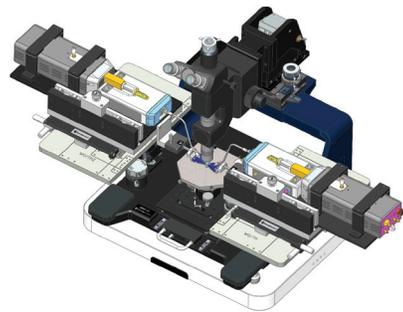
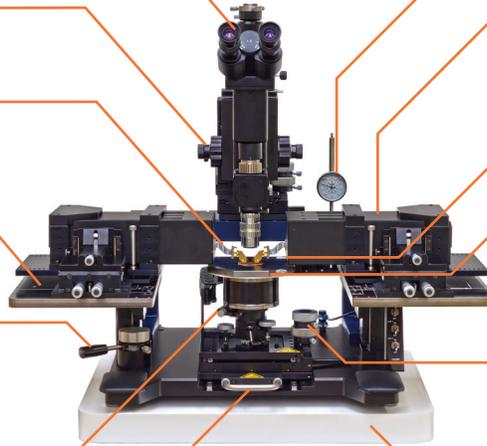
- $< \pm 3 \mu$ m chuck planarity
- Consistent measurement boundary conditions and overtravel over entire wafer

Chuck X-Y movement

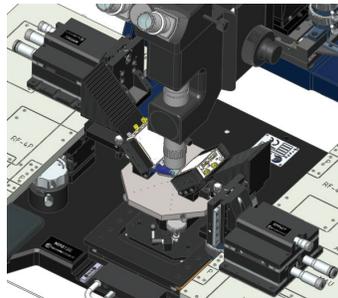
- Precise X/Y positioning with $< 5 \mu$ m resolution
- Independent axis locks for easy linear navigation

Vibration-isolation table

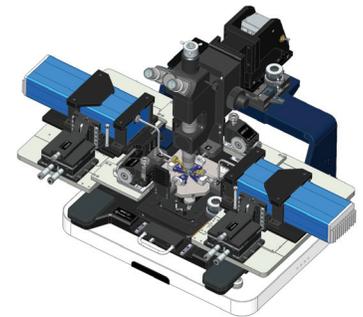
- Ensures contact and minimizes pad damage



SIGMA option for 110 GHz broadband application (EPS-ACC-150MMW-ARS)



SIGMA option for 110 GHz broadband system from Anritsu (EPS-ACC-150MMW-ANR)



SIGMA options for mmW heads from VDI, OML and Rohde & Schwarz (EPS-ACC-150MMW-WG) and 4-port option (EPS-ACC-150RF-4P)

ORDERING INFORMATION

Part Number	Description
EPS150MMW	150 mm manual probing solution* for mmW, THz and load pull applications
EPS-ACC-150MMW-ARS	Instrument integration for 110 GHz broadband systems from Agilent and Rohde & Schwarz
EPS-ACC-150MMW-ANR	Instrument integration for 110 GHz broadband systems from Anritsu
EPS-ACC-150MMW-WG	Instrument integration for mmW heads from VDI, OML and Rohde & Schwarz
EPS-ACC-150MMW-THZ	Instrument integration for sub-THz heads from VDI, OML and Rohde & Schwarz
EPS-ACC-150MMW-MAU	Instrument integration for 50 GHz load pull tuners from Maury Microwave

* The EPS150MMW manual probing solution includes: MPS150 probe station with a 150 mm chuck stage, a tailored mmW platen, contact height gauge, rigid scope bridge with 50 mm x 50 mm movement, unique SlimVUE microscope, camera-ready C-mount, vibration-isolation table, dedicated 150 mm RF chuck with ceramic AUX inlay, fine theta adjustment, full WinCal XE software license, probe cleaning brush, ProbePolish, contact substrate, tweezers and accessories set.

For more information contact us at 1-800-550-3279 (1-503-601-1000) or email sales_support@cmicro.com