

EPS150TESLA

A dedicated 150 mm manual probing solution for high-power device characterization



BENEFITS

Make everyone a measurement expert

Best-known methods for high-voltage and high-current test

Ensure measurement accuracy up to 3,000 V and 40 A

High-isolation, low-resistance, low-leakage dedicated chucks and accessories

Minimize time to data – start testing right away

Seamless instrument integration and fast setup

Protect your investment for the future

Re-configure and upgrade as requirements grow

Minimize training efforts

Designed for convenience and ease of use

The EPS150TESLA 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 high-voltage probing of power MOSFET, IGBT, BJT and other power devices at breakdown voltages up to 3,000 V, and high-current probing up to 40 A for lowest on-state resistance.

The EPS150TESLA allows you to achieve on-wafer test accuracy through the most stable system platform design with a vibration-isolation solution to protect contact quality over measurement time. Optimized optics and backlash-free X-Y-Z movement of industry-standard positioners, and a contact separation drive with 1 μm repeatability, enable precise probe placement comparable to semi-automatic systems. A shielded environment reduces noise and provides safe operating conditions. The high-current and high-voltage probes with replaceable tips and the low-noise, high-power thermal and non-thermal chuck options allow you to measure at the wafer level with a high degree of confidence.

An intuitive operation workflow with pull-out chuck, single-handed chuck adjustment, and a highly-planar chuck surface and movement, as well as an interlocking shield enclosure, ensures safety and ease of operation for both the novice and the expert user.

With unique SIGMA™ options, you can seamlessly integrate the Keysight B1505A parameter analyzer, to reduce time-to-data. To optimize device design without sacrificing space, a non-arcing probe card option is also available. Replaceable HC/HV probe tips reduce cost of ownership. The EPS150TESLA system is easily reconfigured to meet your future project requirements.

Microtron®

Flexible electronic solutions

EPS150TESLA

Stereo zoom microscope with C-mount

- Optimized long working distance
- Stable scope transport on solid bridge

Tailored HV platen

- Up to eight positioners for lateral BJTs
- HV probe card option

Dedicated SIGMA solution

- Seamless integration with Keysight B1505A for optimum measurement accuracy

Unique 200 µm platen contact/ separation stroke

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

Chuck stage with 90 mm roll out

- Quick, risk-free and convenient wafer loading

Safety and shield enclosure

- Safety interlock integrated
- EMI and light-tight protection
- Feedthroughs for signal and media

Patented chuck terminals

- Easy reconfiguration

Dedicated high-power chuck

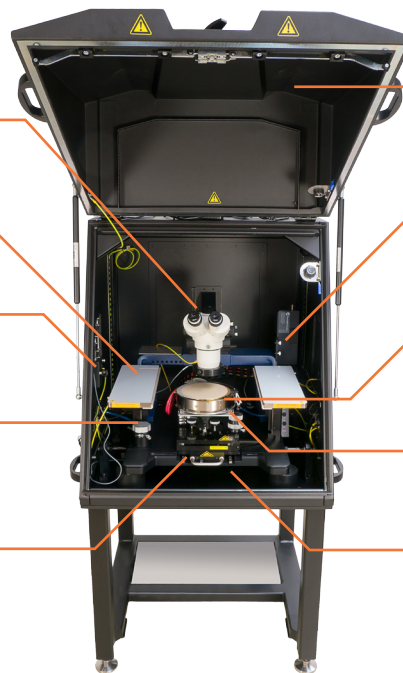
- Enabling 3.000V coaxial and triaxial and 40A
- Lowest surface resistance
- Thin-wafer handling
- Non thermal and thermal up to 300°C

Non-arcing probe card option

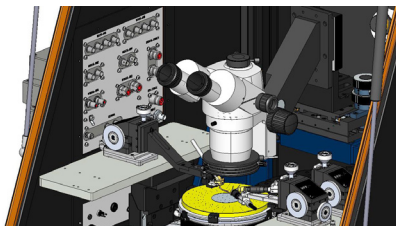
- For safe on-wafer probing and optimized IC design

Vibration-isolation solution

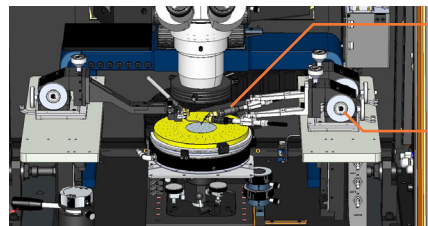
- Ensures contact and minimizes pad damage



EPS150TESLA with P/N 49210 VIP600 vibration isolation platform (optional).



SIGMA option for Keysight B1505A (EPS-ACC-150T-AG)



Application setup using triaxial probes

High-voltage/current probes

- Accurate measurements up to 3,000 V and 40 A (pulsed)

Industry-standard positioners

- Consistent contact force and overtravel

ORDERING INFORMATION

Part Number	Description
EPS150TESLA	150 mm manual probing solution* for high-power applications (chuck option required)
OPT-EPS-150T-NT	Chuck option for EPS150TESLA
OPT-EPS-150T-300CA	ATT thermal chuck option for EPS150TESLA, 30°C to 300°C
EPS-ACC-150T-AG	SIGMA for Keysight B1505A, complete application integration including positioners, probes, tips, cables, adapters and interface
EPS-ACC-150T-AG-LT	SIGMA for Keysight B1505A light, application integration including cables, adapters and interface
EPS-ACC-150T-AG-MS	Mount for Keysight B1505A module selector
EPS-ACC-150T-PCA	Probe card holder option for EPS150TESLA for non-arcing 4.5" probe cards
EPS-ACC-HDTV	Digital high-definition TV option for EPS packages containing C-mount HDTV camera, cables, power supply and monitor, with crosshair overlay

* The EPS150TESLA manual probing solution includes: MPS150 probe station with a 150 mm chuck stage, a platen (20 mm height adjustment), fine chuck rotation, manual scope transport on bridge, camera-ready stereo zoom microscope with 15x - 100x magnification and LED illumination, vibration-isolation solution, EMI-shielded safety enclosure, mounted on a table, tweezers, and all tools for setup and operation. Requires thermal or non-thermal chuck option.

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