

MPI TS300-SE | 300 mm Manual Probe System with ShieldEnvironment™

Designed for accurate and reliable DC/CV and RF measurements at a wide temperature range

Microscope Mount and Movement

- Stable bridge for high quality optics
- Linear z lift for easy reconfiguration
- 50 x 50 mm linear XY movement

DC and RF MicroPositioners

- Supports up to 4 RF and 8 DC MicroPositioners
- Wide range of MicroPositioners available
- Dedicated probe arms for DC/CV and RF measurements

RF Calibration

- 2 auxiliary chucks for calibration substrates
- Built-in ceramic for accurate calibration
- 1 μm flatness for consistent contact quality

Probe Platen

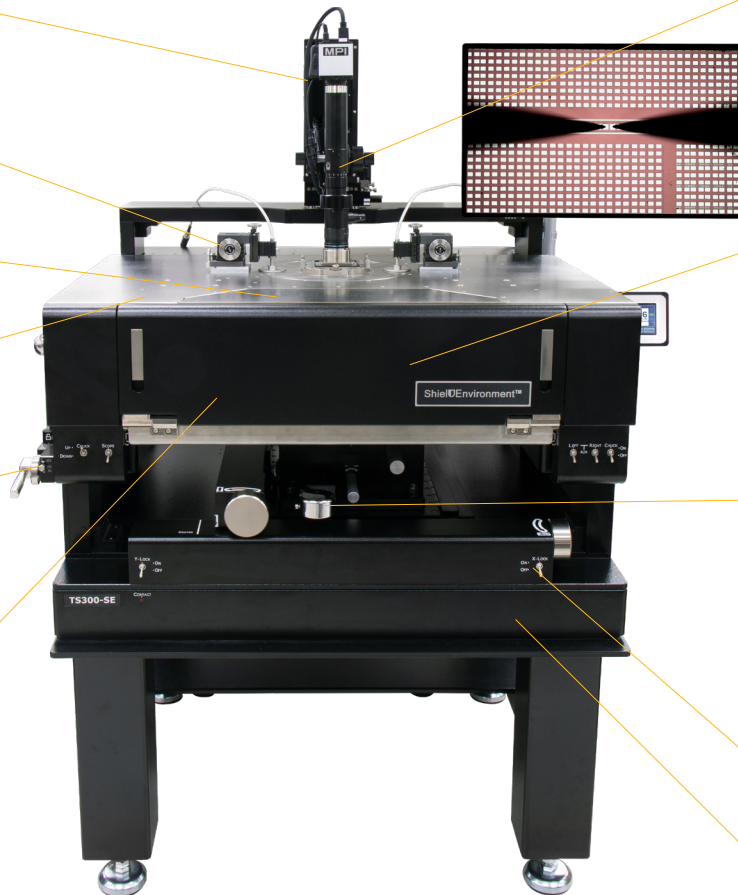
- Stable and rigid design
- Rectangular adjustments for RF MicroPositioners
- Integrated probe platen air-cooling for max. thermal stability

Unique Platen Lift

- Three discrete positions for contact, separation (300 μm) and safety loading 3 mm
- Safety lock function at loading position
- Probe Hover Control (PHC™) with 50, 100 or 150 μm hover height for easy and consistent probe to pad alignment
- "Auto Contact" position with ± 1 μm repeatability for consistent contact quality

ShieldEnvironment™

- Excellent EMI and light-tight shielded test environment for ultra-low noise, low capacitance measurements
- Front door for manual loading of IC or wafers ShieldDCap™
- Consequent shielding and easy re-configuration
- Allows up to 4-port RF or up to 8-ports DC/Kelvin or a combination of those configurations
- 4.5" probe card adapter optional available
- Automated frontdoor on/off lock function for safety ice-free testing



Microscope and Optics Options

- Various optics options available
- iMAG® M or single tube MPI SZ10, MZ12 with up to 12x zoom and 95 mm working distance
- HDMI cameras, monitor user interface without computer

Thermal Chuck Integration

- Full thermal chuck control over touchscreen display
- Easy operation and temperature feedback

Modular Chucks

- Various non-thermal or MPI & ERS PRIME thermal chucks
- Choice of Triaxial or Coaxial connection
- Wide range of temperature from -60°C and up to 300°C
- Field upgradable for reduced cost of ownership
- Easy switch between center and small wafer size control

Kelvin Interface

- Optional Kelvin interface for easy cable management

Chuck XYZ Stage Movement

- Unique puck controlled air bearing stage for quick single-handed operation
- 225 x 260 mm XY fast and fine stage movement
- Resolution < 1.0 μm (0.04 mils) @ 500 $\mu\text{m}/\text{rev}$
- 20 mm Z load / unload stroke, pneumatically
- 5 mm fine Z, resolution < 1.0 μm (0.04 mils) @ 500 $\mu\text{m}/\text{rev}$
- $\pm 5^\circ$ Theta fine adjustment
- Extra wide Y-range for easy wafer loading

Front Mounted Vacuum Control

- Easy access
- Clearly marked

Integrated Vibration Isolation Table

- Designed for optimized footprint
- Low profile design for maximum usability

Available Options

- Vacuum pump and air compressor unit
- Dual monitor stand option
- Instrument shelf option