

MPI TS200-THZ | 200 mm Manual Probe System

Industry's first explicitly designed probe system for accurate mmW, THz and Load-Pull measurements

Microscope and Optics Options

- Single tube with eyepieces MPI SZ10
- Single tube microscopes EZ10 & MZ12 w/ up to 12x zoom, 101 mm working distance and down to 1.68 μm resolution
- HDMI cameras with monitor-based user interface – no computer required

Microscope Mount and Movement

- Stable bridge for high quality optics
- 50 x 50 mm or 80 x 80 linear XY movement
- 90° tilt for easy reconfiguration

Probe Platen

- 4-Port Bridge for DC biasing or 4-port RF
- Designed especially to accommodate large positioners for mmW and THz applications
- Rectangular adjustments for RF positioners

Unique Platen Lift w/ Probe Hover Control™

- Three discrete positions - contact, separation (300 μm), safety loading (3 mm) and additional stop at alignment height at 50, 100 or 150 μm
- Safety lock function at loading position
- "Auto Contact" position with ±1 μm repeatability for consistent contact quality

Small Footprint

- Designed for bench top use
- Vibration damping base included
- Low profile design for maximum usability
- Ideal for mmW, THz and load pull applications

MicroPositioners

- Unique over-travel control option
- MP80-DX option for accurate multi-line TRL calibration
- Supports two bolt down large area MP80 MicroPositioners

Automated Impedance Tuner Integrations

- To achieve optimum tuning range & highest gamma

Available Options

- Vibration Insulation Table
- Monitor stands
- Instrument shelf

Frequency Extender Integration Modules

- Dovetail interface for for easy setup and switching between different frequency bands
- Integration close to the DUT for broadband applications with direct mount of the WG probes, no S-bend is required
- No chuck elevation required to provide maximum mmW measurement stability
- Options for waveguide and coax application
- Universal large area platforms for integrating various frequency extenders up to 1.1 THz
- Micrometer screws for fine leveling of the waveguide probe on the platforms

Modular Chucks

- Dedicated RF or mmW designs for Ambient and Thermal Chuck Systems
- Field upgradable for reduced cost of ownership
- Easy switch between center and small wafer size control

Chuck XYZ Stage Movement

- Fine chuck Chuck XY stage with total travel range of 255 x 325 mm for easy loading
- Unique puck controlled air bearing stage movement with 25 x 25 mm of XY travel and < 1.0 μm resolution
- Chuck theta rotation of 360° with +/-5° fine micrometer travel
- Chuck Z movement of 10 mm with fine travel resolution of 1.0 μm including digital indicator for accurate overtravel setting
- Safe contact feature locking the XY Air-bearing stage while in contact
- Independent locking option of the X or Y axis
- Large vacuum base for maximum stability

Front Mounted Vacuum and Light Control

- Easy access
- Clearly marked

RF Calibration

- 25 x 25 mm gold-plated thermal chuck for testing single ICs (optional)
- Two auxiliary chucks with built-in ceramic for precise calibration of substrates
- 1 μm flatness for consistent contact quality
- QAlibria® - MPI RF Calibration Software

ThermoShield™ (optional)

- Protect extenders from chuck temperatures
- Provides ice-free test environment

