MPI TS200-IFE | 200 mm Manual Probe System with IceFreeEnvironment™

Designed to perform measurements with probe card and MicroPositioners down to -60 °C

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

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

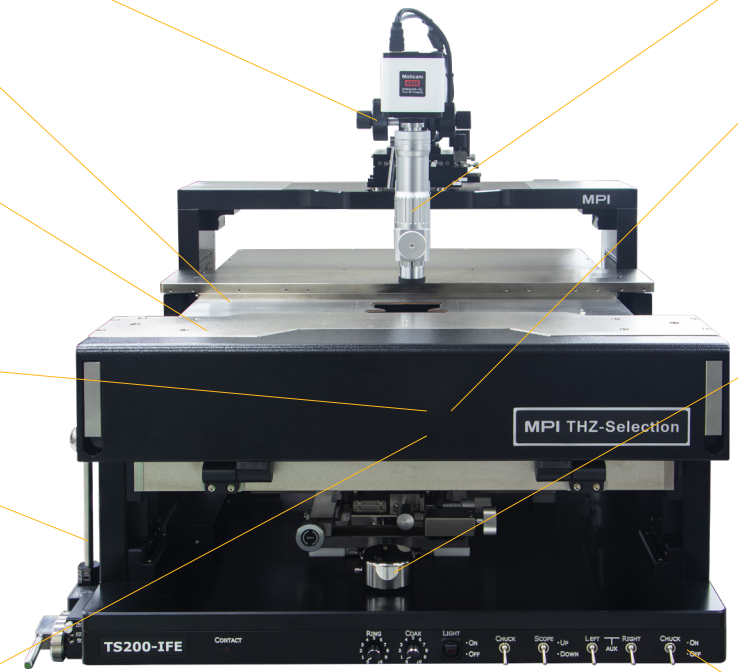
Probe Platen
- Fine adjustment of platen height up to 20 mm, with 1 mm scale
- Supports DC/CV, RF and High Power measurements
- Rectangular adjustments for RF MicroPositioners
- Integrated probe platen air-cooling for max. thermal stability

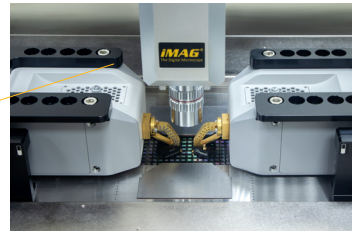
RF Calibration
- 2 auxiliary chucks for calibration substrates
- Built-in ceramic for accurate calibration
- 1 µm flatness for consistent contact quality

Unique Platen Lift
- Three discrete positions for contact, separation (300 µm) and 3 mm safety loading
- Safety lock function at loading position
- “Auto Contact“ position with ±1 µm repeatability
- Additional stop at 50, 100 or 150 µm alignment height

IceFreeEnvironment™
- For using MicroPositioners and probe cards simultaneously, even at negative temperature
- Front door for manual loading of IC or wafers
- Environmental chamber to allow negative temperature thermal chucks
- Automated front door lock function for safe ice-free testing

THZ-Selection Option
- Conversion into a dedicated, mmW and THz probe station
- Incorporates MPI’s innovative design of frequency extender’s integration which hovers over the entire 200 mm wafer
- Minimizing the distance to the DUT to a minimum, providing best possible measurement directivity and accuracy





Microscope and Optics
- Single tube MPI SZ12, MZ12
- Up to 12x zoom and 101 mm working distance
- HDMI cameras, monitor user interface without computer

Modular Chucks
- Various non-thermal or thermal chucks
- Wide range of temperature up to 300 °C
- Field upgradable for reduced cost of ownership
- Choice of Triaxial or Coaxial connection
- Easy switch between center and small wafer size control
- Full thermal chuck control over touchscreen display
- Reuse chuck cooling air for purging environmental chamber

Chuck XYZ Stage Movement
- Unique puck controlled air bearing stage for quick single-handed operation
- 225 x 260 mm XY total stage movement
- 25 x 25 mm XY fine micrometer adjustment
- Resolution < 1.0 µm (0.04 mils) @ 500 µm/rev
- Chuck theta rotation of 360° with ±5° fine travel
- Safe contact function locks XY stage while in contact
- 20 mm pneumatically Z load stroke
- 5 mm fine Z, resolution < 1.0 µm @ 500 µm/rev
- Extra wide Y-range for easy wafer loading
- Optional independent lock of the X or Y axis

Front Mounted Vacuum Control
- Easy access and clearly marked
- For chuck zones and auxiliary sites
- With vibration absorber base designed for bench top use
- Low profile design for maximum usability

Options
- Vibration isolation table
- Dual monitor system
- Vacuum pump and compressor unit
- Instrument shelf
- Dual monitor Stan