PA300PS

The ultimate tool for 300 mm device characterization and reliability test

Advanced EMI/RFI shielding
- Lowest spectral noise (< -170 dbVrms/rtHz)
- Lowest system AC noise (< 4 mVpp)
- Best shielding effectiveness (> 30 dB)
- Completely light tight

Vibration-free, spring-balanced EMI shield covers
- Instantaneous access to measurement setup
- DUT remains ice and condensation-free when open

Instrument shelf for easy access to measurement equipment

EMC² Guard™ Enclosure
- Patent-pending solution integrates large, sensitive measurement instrumentation
- Shortens cable lengths to DUT
- Eliminate investment for expensive shielded rooms
- Best-in-class 1/f measurements

Automated Thermal Management™
- Provides temperature stability of all active devices like RSU, PreAmp or LFN amplifier
- Automated control depending on chuck temperature
- Fast reach of thermal equilibrium before testing
- ReAlign™ option to enable unattended tests at multiple temperatures

Flexible feedthrough options
- Multiple locations for coaxial, triaxial and HF cables
- EMC compliant, light tight

Ergonomic low-profile system design

Probe card adapter with integrated ProtecPlate™
- Extra shielding over the DUT
- No mechanical changeover needed for probe card use

Space maximizing design
- Takes up >20% less floor space
- Smallest footprint of any 300 mm characterization system

AutoQuietMode™
- Eliminates noise by removing power from motorized stages
- Includes chuck stage, microscope stage and any motorized positioners
- Automatically engages when in contact

ProtecDrive™ II technology
- Shields all drive systems
- Lowest impedance grounding
- Best low-level measurements

Powerful ProberBench™ Operating Environment
- Stable, Linux-based controller
- Integrated, reliable industrial PC for running ProberBench software
- Quick integration with all test software from vendors such as Keithley and Agilent

System height adjustable

Unique microscope solution
- High-stability microscope support
- Largest movement area within EMI/RFI-shielded environment
- iVista™ high-resolution digital microscope with 16 megapixel image quality

Patented ContactView™ system
- Visual contact monitoring to eliminate damage to wafers and probes
- ProbeHorizon™ sets a safe working distance and moves wafers into view automatically after loading
- Instantaneous access to measurement setup
- DUT remains ice and condensation-free when open

Large EMI/RFI-shielded enclosure
- Flexible measurement setup with up to 10 positioners
- Use positioners and probe cards simultaneously in an EMI-shielded environment
- Integrate sensitive measurement equipment such as pre-amplifiers
- Shortest cable lengths

Seamless InteGration for Measurement Accuracy (SIGMA™)
- Ensures optimum measurement performance for all common and advanced measurement setups with customer-preferred measurement system
- Easy to install and easy to use link between probes and the corresponding measurement equipment

Expert control panel
- Comfortable use without PC
- Full control of all probe stages with position feedback

Unique IntelliControl™ system control concept
- Entire system control from one panel
- Includes control of measurement equipment
- Analog joystick for precise, sub-micron positioning
- Point-and-shoot navigation
- Quick access to USB ports

Instant access to auxilliary chucks
- Located on forward position of loading mechanism
- Patented Auto CalSite Alignment detects the position of calibration substrates and automates the calibration procedure

Patented loading mechanism
- Keeps sensitive elements (chuck, stage) in place
- Reduces contamination to a minimum
- Reduces thermal conditioning times

Superior thermal performance from -60 °C to 300 °C
- Actively cooled platen reduces thermal drift
- New materials technology reduces conditioning times

Automated data generation
- Test routines run automatically with minimal operator intervention
- ReAlign Technology automatically adjusts alignment after every temperature change to compensate for thermal drift

Integrated vibration isolation system
- Eliminates vibration from external sources (acoustic, architectural, etc.)
- Enhances system stability
- Reduces damage to pads, wafers and probe tips

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CascadeMicrotech®