

WAVELINK

WL-210E

200mm E-Manual Probe Station

Many applications benefit from an isolated probing environment, such as full-range thermal, 1/f, noise-figure, load-pull, and low-leakage CV/IV probing, yet don't require a fully-automated platform. Offering mechanical isolation and precise sub- μ positioning, the **WL-210E** is the ideal choice, while still retaining the option to upgrade to semi-automatic in the future. SIGNATONE - *You asked - We Listened!*



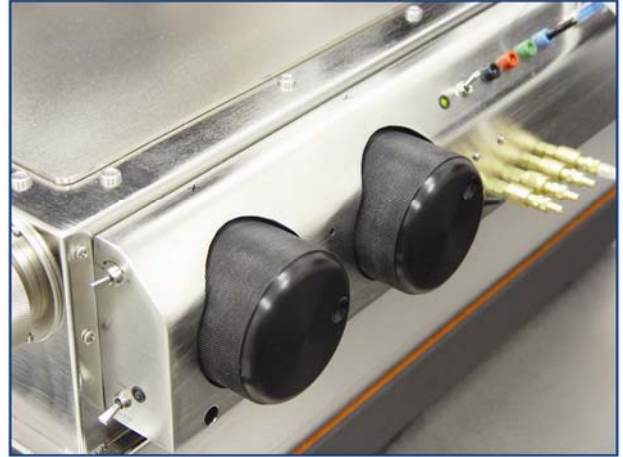
PERFORMANCE, QUALITY, VALUE

SIGNATONE®

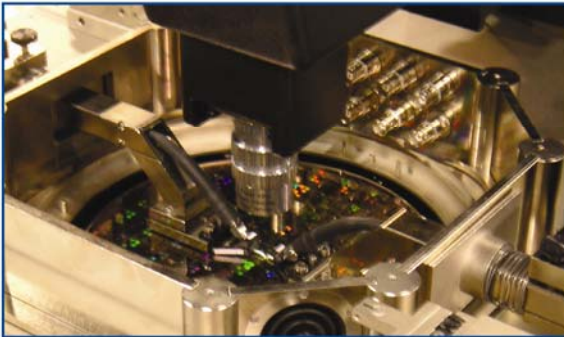
Advanced Microprobing Solutions Since 1968

200mm E-Manual Station

A significant portion of leading-edge probing applications require that the wafer be enclosed in an environmental chamber, either for electrical shielding or to provide frost-free probing. Traditional approaches use a variety of methods to provide this functionality, but they all share one significant limitation; mechanical interference between the stage and the enclosure. This makes ultra-fine positioning of the wafer extremely difficult, if not impossible. By eliminating the sliding plates commonly used to close off the bottom of the enclosure, and utilizing remote motor control, **SIGNATONE E-Manual** stations give the best of both worlds; mechanical isolation and sub- μ positioning. A 10:1 vernier switch solves the problem inherent in conventional manual leadscrew designs by providing rapid motion for large moves and precise control for final positioning of the wafer. Like all SIGNATONE probe stations, the WL-210E is fully upgradeable to support future probing requirements, including full-range thermal and semi-automatic configurations.



The WL-210E features large control knobs with a 10:1 vernier function for optimum control of the wafer stage.



The oversized tophat provides ample room for probing and supports simultaneous probe card and positioner probing

Features & Benefits

- Massive 2" one-piece machined aircraft aluminum base for stability
- Large Heavy-duty nickel steel platen with 4-point support and lift
- Coarse/fine X-Y stage drive for fast, precise positioning
- Separate calibration chuck eliminates the error-inducing step of removing the wafer under test and substituting the substrate in its place for calibration
- Accepts shards through 8" wafers, substrates, PCB's, and thinned wafers
- Independent platen height (locking) and contact/separate controls
- Non-ferrous chuck and stage reduces ferromagnetic resonance and crosstalk
- Supports bolt-down, vacuum, and magnetic base micropositioners
- Banana, BNC, and Triax chuck bias connections
- Quick-Change probe card holder option with independent θ adjustment
- In-The Field* upgrade options for motion control and thermal configurations

Specifications

X-Y Stage

Travel: 200mm X 200mm
Bearings: Carriage & Rails
Stage Drive: Coarse/Fine
Resolution: 5 mm/turn, .5 mm/turn

Wafer Chuck

Size: 200 mm
Metallurgy: Nickel/Gold plated Aluminum
Vacuum: Shard, 100mm, 150mm 200mm
Isolation: > 100 M Ω , > 600V breakdown
Bias Input: Triax, BNC, Banana
Flatness: $\pm 6 \mu\text{m}$ across chuck
Theta: $\pm 10^\circ$, independent of cal chuck
Z: .025" pneumatic actuation

Platen

Adjustment Range: 2", locking
Contact/Separate: .125"
Lift: 4-point, planar
Metallurgy: .625" Nickel-plated steel
Positioner Support: Bolt down, Magnetic, Vacuum

Microscope Transport

Low-Power: 4" X 4", 20 TPI, manual tilt-back
High-Power (Optional): 2" X 2", 40 TPI, 4" vertical lift

Calibration Chuck

Sites: 3
Orientation: Landscape or portrait

Facilities/Mechanical

Dimensions: 55 (21.6") X 66 (26.0") X 78.5 (30.9")
Net Weight: 135 kg (300 lb.)
Shipping Weight: 150 kg (330 lb.)
Air: > 2 cfm, 30 psi
Vacuum: > 400 mm/15 in. Hg

SIGNATONE

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