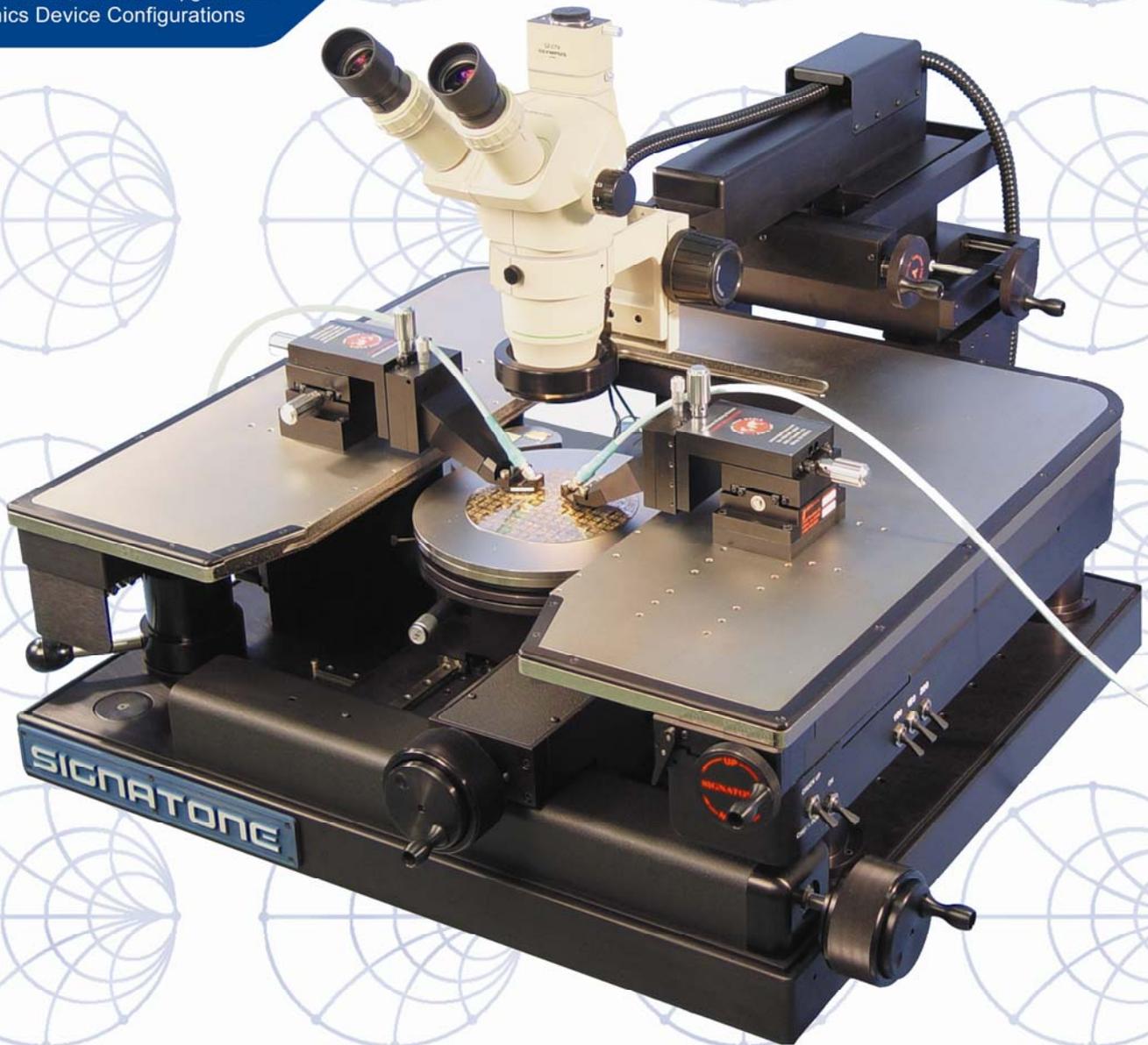


WL-210 RF / Microwave Probe Station

SIGNATONE Analytical RF/Microwave probe stations are designed specifically for high-frequency, high-power, and millimeter-wave applications where non-resonant operation is critical.

Package, Multi-Chip, Hybrid, and Wafer Level Probing
Accurate S-Parameter, Load-Pull, 1/f, Noise-Figure
Thermal, Shielded, and Local Enclosure Options
Engineering, Reliability, and Production Options
Superior Low-Noise Electrical Performance
Multiple Levels of Accurate Motion Control
Stable, Flexible, and Field-Upgradeable
Photonics Device Configurations



WL-210 RF / Microwave Probe Station

SIGNATONE analytical probe stations are recognized as the performance / value leaders in the microprobing market. The WAVELINK Series extends this expertise into the RF & MW segment, historically dominated by more expensive alternatives.

While this has long been held to be the realm of voodoo, the occult, and black magic, this is no longer the case. Any modern probe station precise enough to contact a sub-micron line is certainly stable enough to hit a 100 μ pad with a 50 μ RF probe. In the past decade network analyzers have gotten more stable, accurate, and easy to use. Shouldn't your probe station?

Building on the proven CheckMate architecture, and in consultations with our installed base of RF technologists, SIGNATONE has incorporated many features into the WAVELINK Series unique to the world of VNA's and coplanar probes.

Take another look at SIGNATONE – Perhaps for the first time. We listened, and we think you'll like what you see.



The WL-210 calibration chuck offers 3 substrate sites which support either landscape or portrait format calibration substrates.



The tilt-back microscope provides unobstructed fixturing access.

Common Features

- Massive 2" one-piece machined aircraft aluminum base for stability
- Large Heavy-duty nickel steel platen with 4-point support and lift
- Compound 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 it's 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, local enclosure and thermal configurations

Specifications

X-Y Stage

Travel: 200mm X 200mm
Bearings: Carriage & Rails
Stage Drive: Coarse/Fine Coaxial
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: $\pm 6 \mu$ 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: 91 kg (200 lb.)
Shipping Weight: 150 kg (325 lb.)
Air: > 2 cfm, 30 psi
Vacuum: > 400 mm/15 in. Hg