# Park FX200



## The most advanced AFM for 200 mm samples

Introducing Park FX200, Park Systems' latest innovation in Atomic Force Microscopy tailored for 200 mm samples. Boasting an advanced mechanical structure that ensures a significantly lower noise floor, minimal thermal drift, and exceptional stability, the FX200 sets a new standard in precision and reliability. Its faster Z servo performance and improved high-power sample view enhance operational efficiency and imaging capabilities, while features like automatic probe recognition and probe exchange, laser beam alignment, and macro optics for full sample view simplify user experience and maximize productivity. With optical autofocus, navigation, and sequential measurements at multiple coordinates, coupled with automated AFM scan parameter settings, automated data analysis, the FX200 streamlines complex operations, making it the ideal choice for both research and industrial applications. Delivering superior performance and ease of use, Park FX200 stands poised to revolutionize nanoscale imaging and analysis, empowering scientists and engineers to achieve unprecedented insights and advancements in their fields.



# **Designed for Your Applications**

Failure Analysis Non-destructive analysis and fault isolation







Sensors and Life Science From wafers to molecules



Material Sciences Study the properties, performance, and applications of materials



## Enhanced AFM Core Technology



- Faster Z servo performance
- Lower noise floor and minimal thermal drift
- Small laser spot size

### Intelligent Automation



- Automatic probe type recognition
- Automatic probe exchange
- Automatic laser beam alignment
- Automatic AFM parameter settings

# **Technical Specifications**

#### Scanner

- Flexure-guided high-force Z scanner (15 μm)
- Dual-servo XY scanner (100 μm x 100 μm)

#### Sample Mount

- Up to 200 mm wafer samples
- Up to 16 small samples with vacuum chuck (optional)

#### **On-axis Optics**

- Direct on-axis vision of sample surface and cantilever
- Field of view: 840 μm x 630 μm (w/ 10x objective lens)
- CCD: 5.1 M pixel

## Handles Wafers and Multiple Samples



- Full 200mm wafer support
- Holds up to 16 coupon-sized samples
- Ensuring stable positioning with vacuum chuck



- Macro optics for 200 mm sample overview
- Automatic sequential measurements
- Improved high-power sample view with autofocus
- Automatic data analysis

#### Stage

- XY stage: 300 mm x 200 mm
- Z stage: 22 mm
- Encoder resolution: 50 nm

#### Automatic Probe Exchanger

 16 pre-aligned probes with kinematic mount and QR code chip carrier

#### **Off-axis Macro Optics**

 Large field of view for 200 mm sample overview Resolution: 3,840 x 2,160 pixels

