Company Overview

Leading the Future of Nanometrology
Delivering Nanoscale Solutions for Science and Industry

Park
SYSTEMS

Leading the Future of Nanometrology

About Park Systems

Park Systems is a global leader in nanoscale microscopy and metrology solutions, dedicated to empowering scientists, engineers, and industries to push the boundaries of innovation. Built on a pioneering legacy in atomic force microscopy (AFM), the company has grown into the world's #1 AFM provider and now offers a diversified portfolio that includes imaging spectroscopic ellipsometry (ISE), nanoscale IR spectrometers (AFM-IR), white light interferometry (WLI), active vibration isolation (AVI), and digital holographic microscopy (DHM).

With headquarters in Korea, 16 global offices, and a trusted customer base of leading universities, national labs, and semiconductor fabs, Park Systems is shaping—and expanding—the future of nanometrology.

Driving Metrology Solutions

Park Systems is committed to delivering metrology solutions that bridge scientific discovery and industrial application. Our technologies combine sub-nanometer scale precision with automation, throughput, and reliability to meet the demands of both cutting-edge research and large-scale semiconductor production.

Through continuous innovation and strategic acquisitions such as Accurion (Imaging Spectroscopic Ellipsometry & Active Vibration Isolation) and Lyncée Tec (Digital Holographic Microscopy), we have built the industry's most comprehensive nanometrology portfolio. These solutions empower customers across semiconductors, advanced packaging, materials science, energy, and life sciences to accelerate breakthroughs and achieve lasting success.

Global Leadership in Nanometrology

Key Facts at a Glance

Park Systems achieved a compound annual growth rate (CAGR) of 26% between 2015 and 2025, securing its position as the #1 global leader in atomic force microscopy (AFM) according to MarketsandMarkets, 2024. Today, the company operates in over 70 countries with 16 regional offices and more than 600 employees, of which over 26% are dedicated to R&D.

Revenue Compounded Growth
26%
FY2015 - FY2025

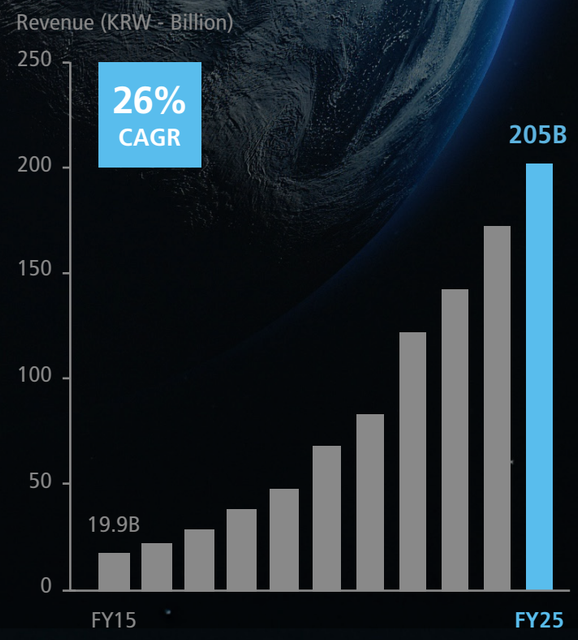
R&D Investment
21%
Manpower of Headcount

AFM Market Share
#1
2024 Global AFM Market Leader

Market Capitalization
>1.46 trillion
Currency in KRW (as of 2025)

Global Network
70+ countries
16 Regional Offices

Recognition
Forbes Asia's 200
Named to Forbes Asia's 200 Listing in '20 / '23 / '25



Financial Highlights

Fiscal Year Ends 2025	Currency in KRW
Revenue	**205B**
Revenue Growth (YoY)	**17%**
Operating Profit	**45B**
Operating Profit Growth (YoY)	**17%**

Our Nanometrology Solutions

Atomic Force Microscope

Ultimate Nano-Scale Metrology

Park Systems' AFM platforms integrate advanced technologies to deliver exceptional accuracy, speed, and ease of use. Our decoupled XY and Z scanners ensure distortion-free imaging, while True Non-contact™ technology preserves both tip and sample integrity. With SmartScan automation and an intuitive workflow, Park AFMs provide reliable, high-resolution results for users of all levels.

Industrial Metrology

Manufacturing Process Control

Leveraging Park Systems' core AFM and optical technologies, our industrial metrology solutions deliver precise and repeatable nanoscale measurements for semiconductor, display, and advanced materials manufacturing. These solutions improve process control, enhance device performance, and accelerate time-to-market for next-generation products.

White Light Interferometer

3D Optical Metrology

The NX-Hybrid WLI combines AFM precision with white light interferometry to deliver fast, large-area measurements from front-end semiconductor processes to advanced packaging and materials R&D. It provides nanometer-scale vertical resolution and sub-micron lateral accuracy for comprehensive surface profiling and topography analysis.

Digital Holographic Microscope

Real-Time 3D Optical Metrology

DHM is a real-time, non-contact optical technology that captures instantaneous, full-field 3D topography and time-resolved (4D) data at camera rate. By measuring both surface and dynamic phenomena with nanometer precision, Park's DHM enables quantitative analysis across semiconductor, MEMS, materials, and life science research.

Imaging Spectroscopic Ellipsometer

Wide Field-of-View Thin-Film Characterization

ISE combines the strengths of ellipsometry and optical microscopy to provide high-resolution mapping of thin-film properties such as thickness, refractive index, and anisotropy. This opens new analytical possibilities in semiconductors, microelectronics, photonics, and bioanalytics where nanoscale film control is critical.

Active Vibration Isolation

Environmental Vibration Noise Isolation

Park's Active Vibration Isolation systems eliminate ambient vibrations that affect sensitive measurements. By stabilizing instrument performance under real-world conditions, AVI ensures consistent accuracy in both research and high-volume production environments.

Where It All Started: The Core of AFM Innovation

Park Systems pioneered key breakthroughs that have defined modern atomic force microscopy. From decoupled flexure scanners to True Non-contact™ mode, Park's relentless innovation continues to shape the future of nanoscale metrology.

System **Innovation**

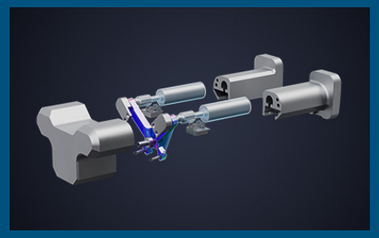
Decoupled Flexure Scanners / 3D AFM / Tip Scanning Head

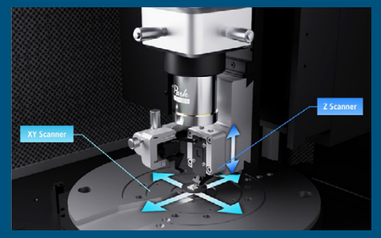
Measurement **Innovation**

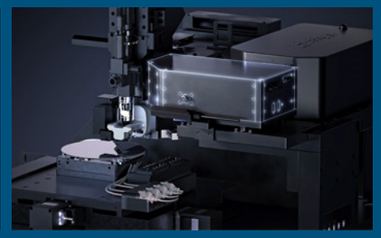
True Non-Contact™ Mode / PinPoint™ Mode / Narrow Trench Mode / Automated Workflows

Hybrid Solution **Innovation**

AFM + WLI / AFM + IR Spectrometer







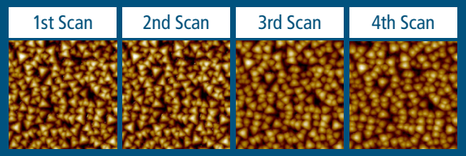
Redefining Precision

AFM uses a fine tip on a flexible cantilever to scan the sample surface, measuring forces that reveal a 3D nanoscale image. Park Systems set the global benchmark for AFM performance—delivering sub-nanometer accuracy, automation, and throughput demanded by both academic researchers and the world's top semiconductor fabs.

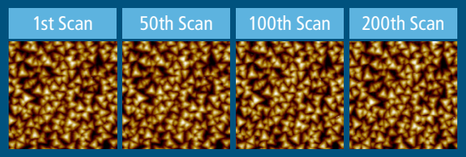
Innovation that Delivers

With True Non-contact™ imaging and advanced scanning modes, Park AFMs eliminate artifacts while maintaining repeatable precision. This seamless reliability allows customers to move from R&D to industrial production without compromise.

Tapping mode



True Non-contact™ mode



CrN Tip-checking Sample

Proven Partnership

In collaboration with imec and leading semiconductor manufacturers worldwide, Park has deployed over 200 in-line AFMs used for wafer inspection, defect analysis, and advanced packaging—empowering fabs to improve yield and accelerate device development.

Redefining Nano Research with Precision, Reliability, and Simplicity: Research AFMs

Empowering Scientific Discovery

From fundamental science to advanced engineering, nanoscale research demands precision, flexibility, and reproducibility. Park Systems Research AFMs deliver unmatched accuracy and ease of use—empowering scientists to make faster, more confident discoveries.

Tailored for Every Research Need

From delicate biological samples to large semiconductor wafers, Park AFMs scale effortlessly. Compact platforms provide ultra-high-resolution imaging, while large-sample systems enable multi-modal materials and device studies with the same precision.

Specialized AFM and AFM-IR Solutions

For complex nanoscale challenges, Park offers integrated nanoscale IR spectrometers, combining topographical, mechanical, and chemical characterization in one instrument. Researchers gain deeper insight into polymers, 2D materials, and life science samples with reproducible, high-resolution data.

Bridging Research and Industry

Park's large-sample AFMs unite laboratory-grade precision with industrial-scale throughput, eliminating barriers between R&D and production. This new generation of AFMs redefines nanoscale metrology—advancing both scientific discovery and manufacturing innovation.

Empowering Industry with Precision Metrology: Industrial AFMs

Precision for the World's Most Demanding Industries

Semiconductors and displays form the foundation of modern technology, requiring uncompromising nanoscale precision. Park Systems delivers metrology solutions engineered to meet these challenges—ensuring accuracy, reliability, and throughput from R&D to high-volume manufacturing.

Semiconductor Metrology

Park's automated AFM platforms are trusted by the world's leading semiconductor fabs for high-resolution nanoscale metrology and advanced defect characterization. Proven through collaborations with top-tier partners as well as imec, Park's in-line AFM solutions play a critical role in enhancing yield and accelerating time-to-market for next-generation devices.

Display & Advanced Packaging Applications

For advanced displays and heterogeneous integration, Park's AFMs deliver 3D topography, thin-film, and roughness measurements essential for controlling novel materials and multi-layer structures. Their non-contact precision and low-damage scanning enable accurate analysis of OLED, micro-LED, and TSV structures—bridging the gap between research and production.

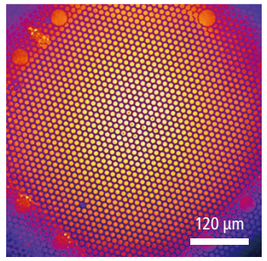
Future-Ready Manufacturing

With expanded production capacity planned at the Cheonggye Industrial Complex, Uiwang (2030s) and continuous investment in next-generation AFM and hybrid optical metrology, Park Systems is well positioned to support the rapid evolution of global semiconductor and display industries.

Advanced Optical, Spectroscopic & Specialized Solutions

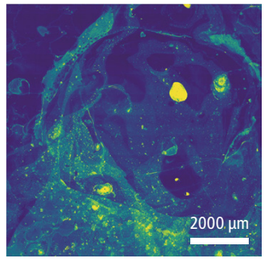
Digital Holographic Microscope (DHM)

DHM is a real-time, non-contact imaging technology that provides full-field 3D topography and time-resolved (4D) quantitative analysis at camera rate. By capturing surface and dynamic phenomena with nanometer precision, Park's DHM expands applications beyond life sciences to semiconductor, MEMS, and materials research, while still supporting label-free cellular imaging for biological studies.



Imaging Spectroscopic Ellipsometer (ISE)

By combining the strengths of ellipsometry and optical microscopy, Park's ISE enables high-resolution mapping of thin-film thickness, refractive index, and anisotropy across wide fields of view. This opens new analytical possibilities in areas that demand precise nanoscale film control, including semiconductors, microelectronics, photonics, and bioanalytics.

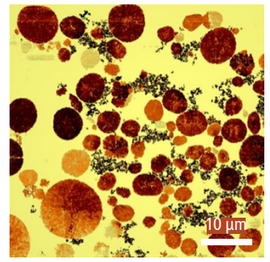


Nanoscale IR Spectrometers (AFM-IR)

By integrating AFM with nanoscale IR spectrometers, Park's AFM-IR delivers nanoscale chemical imaging of composition, structure, and reactivity. Researchers gain powerful insights into polymers, composites, 2D materials, and hybrid structures, unlocking deeper understanding of their functional and chemical performance.

High Vacuum AFM (NX-Hivac)

Operating in a controlled, oxygen-free vacuum environment, Park's NX-Hivac achieves greater accuracy, repeatability, and stability while minimizing tip and sample contamination. With rapid pump-down capability and high-stability conditions, it enables sensitive nanoscale research on materials, devices, and surfaces that require pristine measurement environments.



Milestones of Progress: Pioneering Nanometrology Since the Birth of AFM

From contributing to the invention of AFM at Stanford to leading global nanometrology today, Park Systems has advanced the field through precision, innovation, and expansion.

The Genesis

1980-90s

Dr. Sang-il Park contributes to the invention of AFM at Stanford and later founds Park Scientific Instruments to commercialize AFM.

Innovation & Business Expansion

1997

Establishes Park Systems Corp. in Korea, introducing True Non-Contact™ technology.

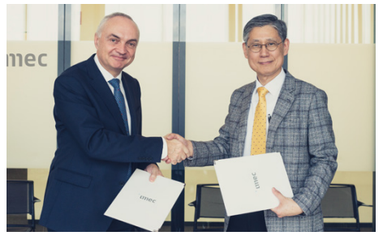
2000s

Expands into industrial AFM systems, adopted by global semiconductor fabs.

Global Recognition

2015

Listed on KOSDAQ and joins imec's Industrial Affiliation Program.



2020

Named to 'Forbes Asia's 200 Best Under a Billion', recognized globally for excellence in growth and innovation.

Beyond AFM: Global Leadership in Nanometrology

2022

Acquires Accurion GmbH (ISE & AVI), expanding nanometrology capabilities beyond AFM.

2025

Acquires Lyncée Tec SA (DHM), strengthening optical metrology expertise.

2026

Opens new global headquarters in Gwacheon City, establishing a hub for innovation, collaboration, and the future of nanometrology.

Message from the CEO

At Park Systems, we believe the future of technology begins at the nanoscale. From our pioneering role in Atomic Force Microscopy to our expanding portfolio in optical and advanced metrology, our mission has remained clear: to empower scientists and engineers with the precision tools they need to innovate and improve the world.

Our growth has been fueled by innovation, strategic partnerships, and trust from customers and investors alike. As we expand our global footprint with a new headquarters in Gwacheon City and a production plant in the Cheonggye Industrial Complex, Uiwang, we are strengthening our capacity to deliver solutions that shape the next era of semiconductors, materials, and life sciences.

We are committed not only to advancing technology but also to ensuring responsible growth. By investing in people, sustainability, and strong governance, Park Systems continues to lead with integrity while creating lasting value for our partners worldwide.

> “Park Systems delivers advanced nanoscale microscopes, providing innovative solutions that solve the toughest measurement challenges, as *The Best Nanoscale Metrology Solutions Partner.*”

Sang-il Park
Founder, Chief Executive Officer and Chairman

Brightening Tomorrow with Nanometrology

Driving Nanoscale Innovation **with Responsibility**

Commitment to ESG

Park Systems upholds the highest standards of environmental, social, and corporate governance. We maintain ISO 14001 certification for environmental management, ensuring systematic, eco-conscious practices across our operations. Diversity and inclusion remain at the heart of our culture, with women representing nearly 30% of employees and 19% of executives at our headquarters, complemented by a global team with more than 33% non-Korean nationals.

We are equally committed to transparent governance, with a strong, independent board guiding sustainable decision-making and a fair compensation structure that reflects performance and responsibility. By aligning growth with responsibility, Park Systems ensures that innovation at the nanoscale contributes to progress on a global scale.

Enabling Nanoscale Advances

150, Gwacheon-daero 12-gil, Gwacheon-si, Gyeonggi-do, Republic of Korea

parksystems.com