+357 96 030922
info@marketpublishers.com

# Global Automated Atomic Force Microscopy Supply, Demand and Key Producers, 2026-2032

https://marketpublishers.com/r/GB339F713CCDEN.html
Date: June 2026
Pages: 139
Price: US$ 4,480.00 (Single User License)
ID: GB339F713CCDEN

## Abstracts

The global Automated Atomic Force Microscopy market size is expected to reach $ 622 million by 2032, rising at a market growth of 9.4% CAGR during the forecast period (2026-2032).

In 2025, global Automated Atomic Force Microscopy production reached approximately 3,878 Units.The average price is approximately $80,000.Automated Atomic Force Microscope Systems refer to AFM-based nanoscale measurement instruments that integrate probe scanning, surface interaction detection, automated sample positioning, probe and laser alignment, recipe-driven measurement, automatic scan optimization, batch data acquisition, defect coordinate import, large-sample or wafer stages, automated probe handling, and software-enabled data analysis.

Based on our research, automated AFM systems should be understood as a specialized industrial and metrology-oriented extension of conventional atomic force microscopy rather than a broad synonym for all AFM instruments. The core market boundary is defined by automation depth: automated sample navigation, probe alignment, laser and detector adjustment, recipe-based scanning, batch measurement, wafer or large-sample stages, automated probe handling, defect-coordinate import, and software-driven data processing. This distinction is important because many AFM manufacturers are real OEMs, but only a subset can be regarded as automated AFM system suppliers under a narrow market-sizing scope. For this reason, the global longlist is intentionally broader than the core formal list: research AFM, UHV SPM, cryogenic AFM and correlative AFM suppliers remain relevant, while pure distributors, probe suppliers and obsolete product lines are excluded from the revenue model.

From a supply-side perspective, the competitive structure is divided between a

+357 96 030922
info@marketpublishers.com

concentrated semiconductor metrology segment and a fragmented long-tail of research, specialty and correlative AFM vendors. Bruker, Park Systems, Nearfield Instruments, Semilab and Nanosurf are the most visible suppliers in wafer-level or semiconductor-oriented automated AFM, with different product architectures ranging from fab-ready AFM metrology to high-throughput multi-head systems and 300 mm wafer platforms. Hitachi High-Tech and HORIBA represent strong Japanese capabilities in automated SPM and correlative AFM platforms, while Oxford Instruments/Asylum Research, NenoVision, attocube, Scienta Omicron, UNISOKU, RIBM and other specialty vendors address high-end research, low-temperature, high-speed, AFM-in-SEM and materials-characterization use cases. China is still an emerging supply base, but Nanjing Aimey, Truth Instruments, Biaodu Quantum and Benyuan Nano indicate that local equipment companies are moving from research AFM toward semiconductor-grade and intelligent AFM systems.

Demand growth is increasingly linked to advanced semiconductor manufacturing, advanced packaging and high-value materials characterization. EUV process control, 3D NAND, DRAM and HBM, hybrid bonding, CMP monitoring, power semiconductors, compound semiconductor wafers and defect review all create use cases where nanometer-scale 3D topography and localized surface information matter. Automated AFM will not replace high-throughput optical metrology, CD-SEM, OCD, ellipsometry or X-ray tools across the entire process flow; its role is more likely to be that of a precision node within hybrid metrology. This gives the market attractive growth potential but also imposes a ceiling on penetration because throughput, measurement area and process integration remain critical constraints.

From a technology roadmap standpoint, the industry is moving in three directions. The first is higher-throughput wafer AFM, enabled by miniaturized scan heads, multi-head architectures, automated wafer handling and defect-coordinate workflows. The second is intelligent and user-friendly AFM, where automated setup, scan optimization and AI-assisted analysis reduce operator dependence. The third is correlative and application-specific AFM, including AFM-Raman, AFM-IR, PiFM, AFM-in-SEM, cryogenic AFM and high-speed bio-AFM. Policy-driven semiconductor localization, rising fab capital expenditure, new product launches and regional supply-chain diversification will support demand, but actual adoption will depend on tool reliability, service capability, recipe ecosystem, data compatibility and proven value in production environments.

This report studies the global Automated Atomic Force Microscopy production, demand, key manufacturers, and key regions.

+357 96 030922
info@marketpublishers.com

This report is a detailed and comprehensive analysis of the world market for Automated Atomic Force Microscopy and provides market size (US$ million) and Year-over-Year (YoY) Growth, considering 2025 as the base year. This report explores demand trends and competition, as well as details the characteristics of Automated Atomic Force Microscopy that contribute to its increasing demand across many markets.

Highlights and key features of the study
Global Automated Atomic Force Microscopy total production and demand, 2021-2032, (K Units)
Global Automated Atomic Force Microscopy total production value, 2021-2032, (USD Million)
Global Automated Atomic Force Microscopy production by region & country, production, value, CAGR, 2021-2032, (USD Million) & (K Units), (based on production site)
Global Automated Atomic Force Microscopy consumption by region & country, CAGR, 2021-2032 & (K Units)
U.S. VS China: Automated Atomic Force Microscopy domestic production, consumption, key domestic manufacturers and share
Global Automated Atomic Force Microscopy production by manufacturer, production, price, value and market share 2021-2026, (USD Million) & (K Units)
Global Automated Atomic Force Microscopy production by Type, production, value, CAGR, 2021-2032, (USD Million) & (K Units)
Global Automated Atomic Force Microscopy production by Application, production, value, CAGR, 2021-2032, (USD Million) & (K Units)

This report profiles key players in the global Automated Atomic Force Microscopy market based on the following parameters - company overview, production, value, price, gross margin, product portfolio, geographical presence, and key developments. Key companies covered as a part of this study include Bruker Corporation, Park Systems Corp., Nearfield Instruments B.V., Semilab Zrt., Nanosurf AG, Hitachi High-Tech Corporation, DAEIL SYSTEMS, Oxford Instruments plc, HORIBA, Ltd., Molecular Vista, Inc., etc.

This report also provides key insights about market drivers, restraints, opportunities, new product launches or approvals.

Stakeholders would have ease in decision-making through various strategy matrices used in analyzing the World Automated Atomic Force Microscopy market

Detailed Segmentation:

+357 96 030922
info@marketpublishers.com

Each section contains quantitative market data including market by value (US$ Millions), volume (production, consumption) & (K Units) and average price (US$/Unit) by manufacturer, by Type, and by Application. Data is given for the years 2021-2032 by year with 2025 as the base year, 2026 as the estimate year, and 2027-2032 as the forecast year.

Global Automated Atomic Force Microscopy Market, By Region:

United States

China

Europe

Japan

South Korea

ASEAN

India

Rest of World

Global Automated Atomic Force Microscopy Market, Segmentation by Type:

Fully Automated AFM

Semi-automated AFM

Global Automated Atomic Force Microscopy Market, Segmentation by Measurement Functions:

Automated AFM for Topography Measurement

Automated AFM for Multi-physics Measurement

+357 96 030922
info@marketpublishers.com

Others

Global Automated Atomic Force Microscopy Market, Segmentation by Maximum Sample Size:

Small-Sample Automated AFM: Max Sample Size
Medium-Sample Automated AFM: Max Sample Size 100–200 mm

Large-Sample Automated AFM: Max Sample Size > 200 mm

Global Automated Atomic Force Microscopy Market, Segmentation by Application:

Semiconductors and Electronics

Materials Science and Nanotechnology

Life Sciences and Biomedicine

Others

Companies Profiled:

Bruker Corporation

Park Systems Corp.

Nearfield Instruments B.V.

Semilab Zrt.

Nanosurf AG

Hitachi High-Tech Corporation

DAEIL SYSTEMS

+357 96 030922
info@marketpublishers.com

Oxford Instruments plc

HORIBA, Ltd.

Molecular Vista, Inc.

ICSPI Corp.

Nanjing Aimey Instrument Technology Co., Ltd.

Truth Instruments Co., Ltd.

NenoVision s.r.o.

RIBM Co., Ltd.

attocube systems AG

Key Questions Answered:
1. How big is the global Automated Atomic Force Microscopy market?
2. What is the demand of the global Automated Atomic Force Microscopy market?
3. What is the year over year growth of the global Automated Atomic Force Microscopy market?
4. What is the production and production value of the global Automated Atomic Force Microscopy market?
5. Who are the key producers in the global Automated Atomic Force Microscopy market?
6. What are the growth factors driving the market demand?

+357 96 030922
info@marketpublishers.com

# Contents

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com



## 5 MARKET ANALYSIS BY TYPE

+357 96 030922
info@marketpublishers.com



## 6 MARKET ANALYSIS BY MEASUREMENT FUNCTIONS



## 7 MARKET ANALYSIS BY MAXIMUM SAMPLE SIZE

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

# List Of Tables

## LIST OF TABLES

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

# List Of Figures

## LIST OF FIGURES

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

## I would like to order

Product name: Global Automated Atomic Force Microscopy Supply, Demand and Key Producers, 2026-2032

Product link: https://marketpublishers.com/r/GB339F713CCDEN.html

Price: US$ 4,480.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:
info@marketpublishers.com

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/GB339F713CCDEN.html