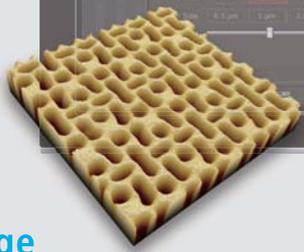**single click to image**

Park SmartScan™

Bringing the power and versatility of AFM technology to everyone

Park SmartScanTM is a revolutionary operating software for Park AFMs that lets even inexperienced, untrained users produce high quality nanoscale imaging through a single click of a mouse in auto mode, which rivals that made by experts using conventional techniques. SmartScan manual mode also provides all of the functions and tools necessary for more seasoned users to feel at home. This combination of extreme versatility, ease-of-use, and quality makes SmartScan the best AFM operating software available.

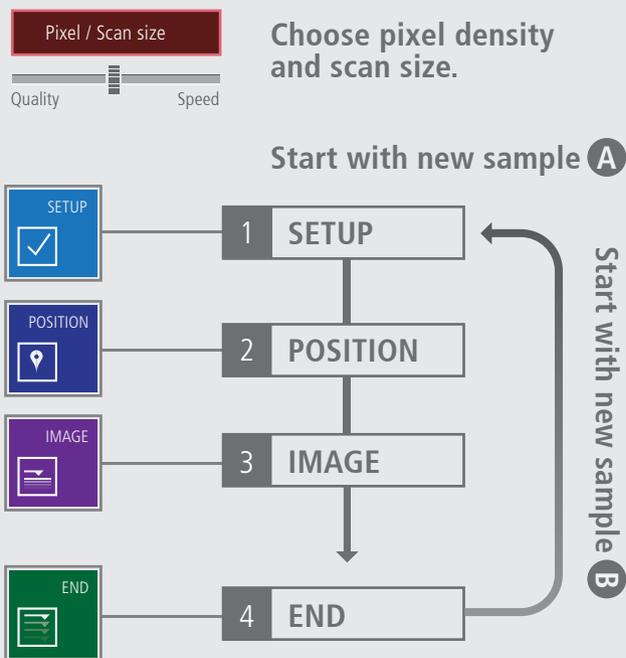**www.parkAFM.com**

Park SYSTEMS

Park SmartScan™

An AFM OS for everyone, from amateurs to experts

Whether your AFM needs are focused on academic research, industrial metrology or failure analysis, SmartScan's Auto mode offers a streamlined system to generate publishable high quality AFM data. Moreover, SmartScan™ promises productive sessions with an AFM even for beginners to obtain quality data as good as an expert's, in much shorter time.
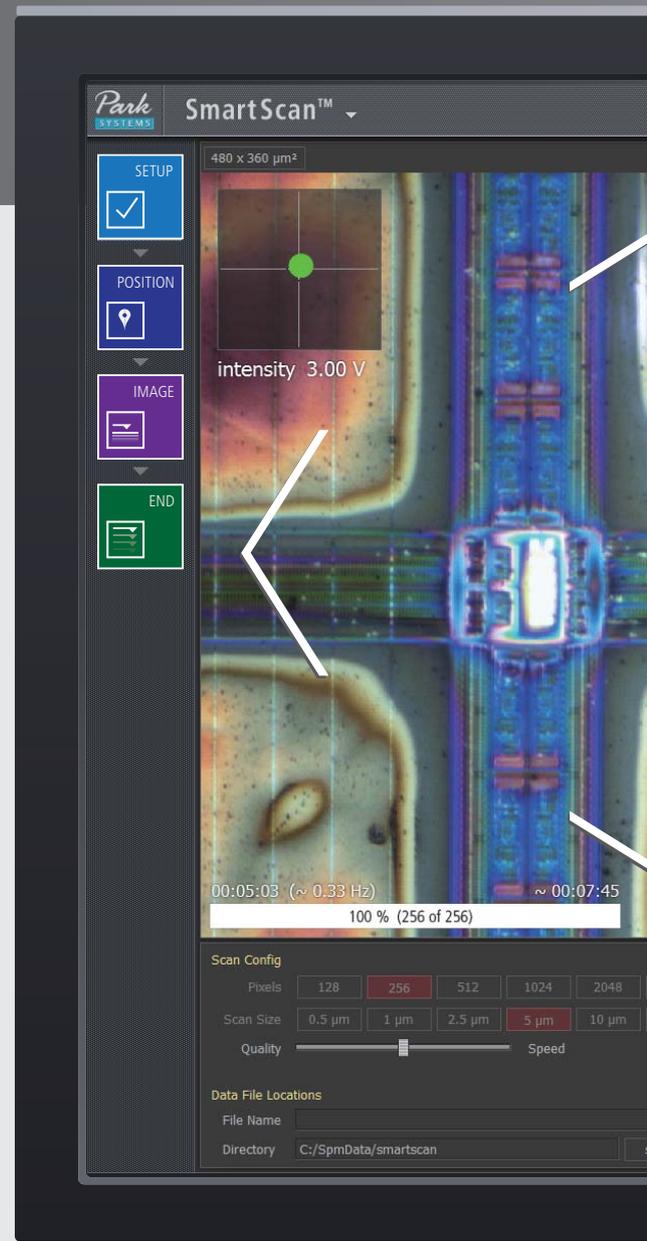
User-Friendly UX

With the SmartScanUI and layout, everything is at your fingertips. A large optical window provides easy access to a view of the laser spot on the cantilever, laser beam alignment on PSPD, and tip and sample positions. It also allows you to easily control the vision, the XY stage, Z stage, Optics stage, light strength, and more on the CCD view. Command up to 8 individual trace-lines, or channels, at once (e.g. topography, phase, amplitude, EFM, and MFM) and conveniently save custom trace-line profiles. You may also monitor any two separate signals(such as topography and conductivity)on the same real-time dual-axis in sync for comprehensive analysis.

Pixel / Scan size

Quality ————————— Speed

Choose pixel density and scan size.

Start with new sample (A)

SETUP ☑	1	**SETUP**
POSITION ⊙	2	**POSITION**
IMAGE ▤	3	**IMAGE**
END ▤	4	**END**

Start with new sample (B)

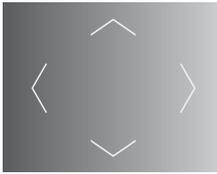## Single-Click Imaging with SmartScan™ Auto Mode

All you need to specify for AFM imaging are quality-speed preference, pixel density and scan size. Outside of those factors, you can leave all sophisticated AFM parameters up to the Auto mode of SmartScan™. The system will start a measurement with optimized conditions for imaging automatically at the click of a button.

SmartScan™

480 x 360 µm²

intensity 3.00 V

00:05:03 (~ 0.33 Hz)   ~ 00:07:45

100 % (256 of 256)

Scan Config

Pixels	128	256	512	1024	2048
Scan Size	0.5 µm	1 µm	2.5 µm	5 µm	10 µm

Quality ————————— Speed

Data File Locations

File Name

Directory   C:/SpmData/smartscan

FastApproach™

Click the Position button, and the Z scanner approaches the sample automatically and at a much higher speed than the typical manual approach. Park's patented FastApproach™ safely takes the probe down to the sample surface at full speed without the user's intervention and engages in just 10 seconds after loading the cantilever.
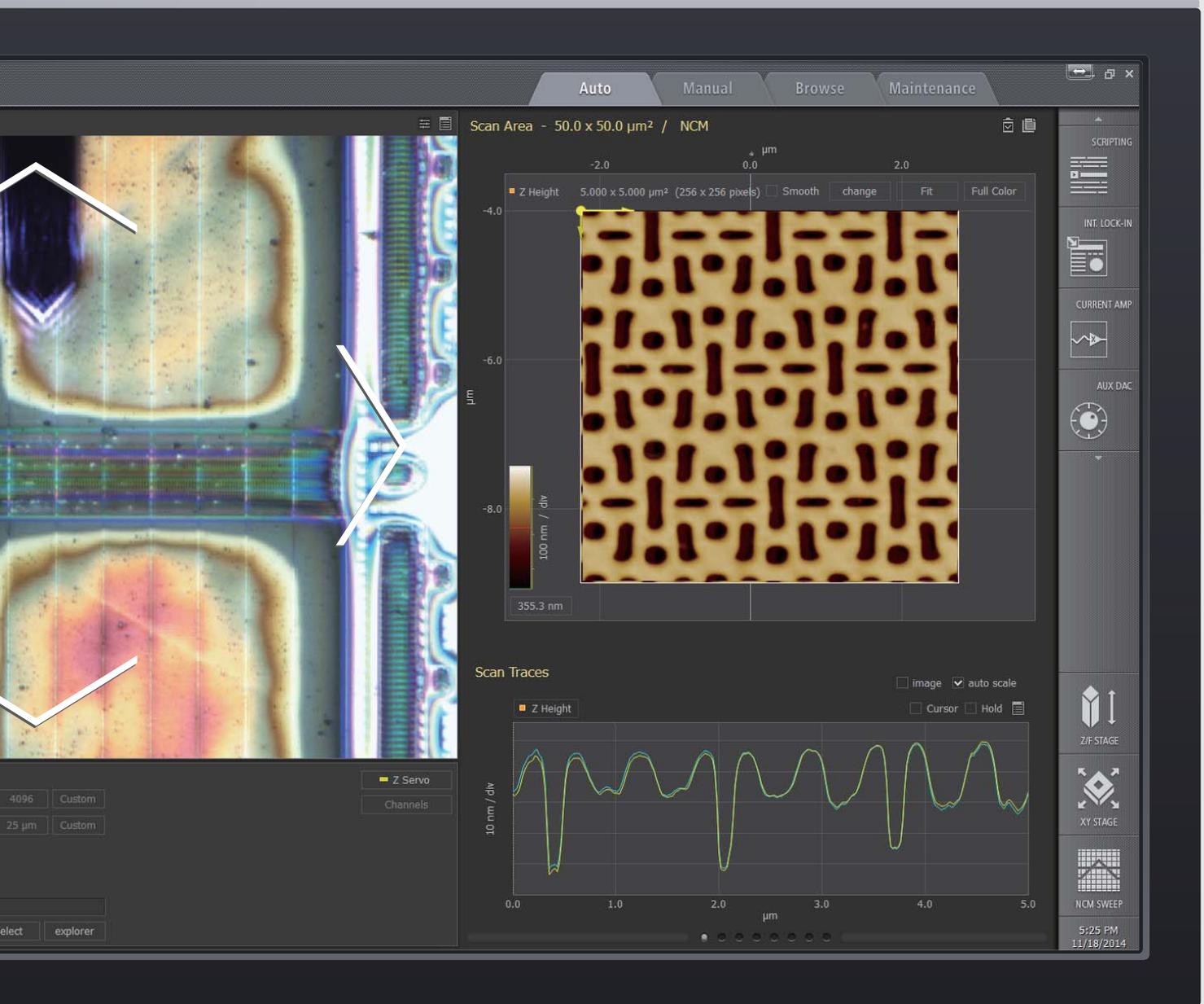
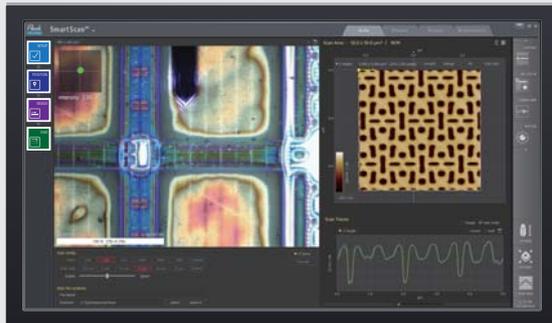## Easy to Find an Area of Interest

After probe-to-surface engagement, the optical camera will automatically focus on the sample to find your area of interest (AOI). The UX of SmartScan™ easily enables intuitive navigation of the sample by controlling the motorized stages in the integrated optical window. You can move theAOI of the sample directly by clicking the desired position in the optical window.

Speeds Up Imaging with AdaptiveScan™

Park's innovative AdaptiveScan™ controls the scan speed automatically based on the peaks and valleys of the sample surface. AdaptiveScan™ adjusts the optimum scan speed dynamically to acquire a quality image of an unknown morphology at a higher speed. This effectually shortens the imaging time while retaining top image quality comparable to that obtained by a well-trained expert manually. When moving to neighboring locations or zooming-in to a target, AdaptiveScan automatically applies a new optimal condition.
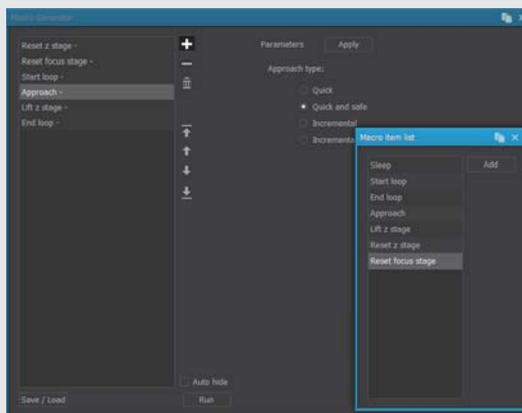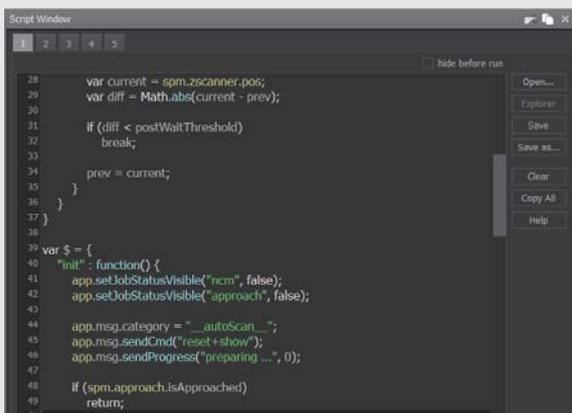
A Single Solution for both Auto and Manual Operation

Although the Auto mode of SmartScan™ offers extremely quick and easy AFM operation by automatic optimization, SmartScan™ also provides a way to use AFM in a typical manual modeof personal imaging condition and measurement preferences as necessary.
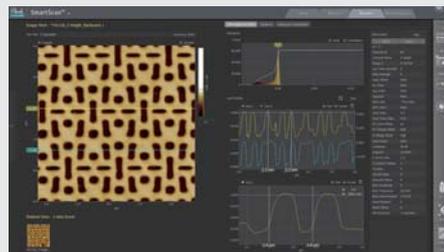

Better Productivity for Advanced Users: Scripting and Macros

SmartScan provides you with a powerful scripting tool to design advanced experimentsrequiringhigh data acquisition flexibility.Furthermore, SmartScan comes with built-in macros that can be easily loaded and applied for repeating operations, such as moving the XY or the Z stage to a specific location, or resetting the operation. You can edit existing macros or create new ones as needed, and you can tweak settings in realtime using scripts to automate many parts of microscopy use.

Imaging, Measurement and Analysis

SmartScan allows you to control the various signals on the fly while scanning. You can click and drag your mouse on the image to zoom down to where your investigation takes you. SmartScan's seamless integration of image and measurement-taking functions allow users to easily gain a holistic picture of the sample. You can open multiple image channels to view and analyze from different perspectives (amplitude, phase, height, et cetera up to 16 image channels).

Start making scans smarter today

Call us to obtain a copy of Park SmartScan, the world's most advanced AFM operating software by Park Systems. If you want to learn more about SmartScan, please visit us at www.parkafm.com
or contact one of our representatives today.

GLOBAL HEADQUARTERS: +82-31-546-6800   **JAPAN HEADQUARTERS:** +81-3-3219-1001   **E-mail:** inquiry@parkAFM.com
AMERICAS HEADQUARTERS: +1-408-986-1110   **SE ASIA HEADQUARTERS:** +65-6634-7470   **Web:** www.parkAFM.com