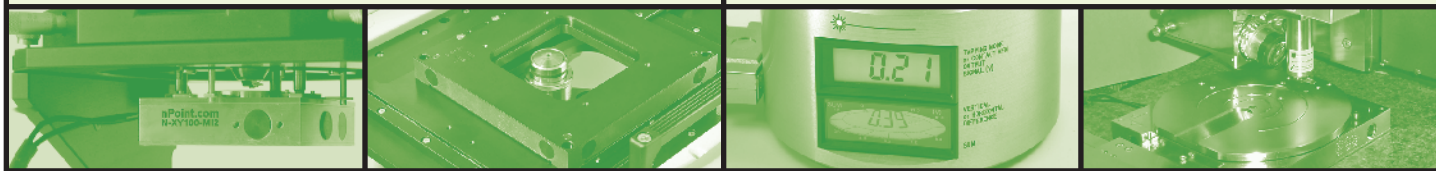


The nPoint scanners are available in XY or XYZ configurations. Each system utilizes closed-loop capacitive feedback to ensure outstanding linearity and position accuracy.

Travel (um)			Part Number
X	Y	Z	
<b>For Agilent 5500</b>			
100	100	-	4715114-A55
<b>For Agilent 5500LS</b>			
100	100	-	4715114-A55LS
100	100	-	4715100-A55LS
100	100	25	4715102-A55LS
200	200	-	4715101-A55LS
200	200	25	4715103-A55LS
400	400	-	4715132-A55LS
400	400	100	4715117-A55LS-01 (or -02)
<b>For Agilent 5600LS</b>			
100	100	-	4715114-A56LS
100	100	-	4715100-A56LS
100	100	25	4715102-A56LS
200	200	-	4715101-A56LS
200	200	25	4715103-A56LS
400	400	-	4715132-A56LS
400	400	100	4715117-A56LS-01 (or -02)
<b>For Ambios Q-Scope™</b>			
100	100	-	4715100-QS
200	200	-	4715101-QS
<b>For Veeco Bioscope 1 or SZ™</b>			
100	100	-	4715126-BO
100	100	-	4715126-BZ

Travel (um)			Part Number
X	Y	Z	
<b>For Veeco Dimension 3000™</b>			
100	100	-	4715100-D30
100	100	25	4715102-D30
200	200	-	4715101-D30
200	200	25	4715103-D30
<b>For Veeco Dimension 3100™</b>			
100	100	-	4715100-D31
100	100	-	4715116-D31 (vacuum chuck)
100	100	-	4715126-D31
100	100	10	4715128-D31
100	100	10	4715134-D31 (vacuum chuck)
100	100	25	4715102-D31
150	150	10	4715143-D31
200	200	-	4715101-D31
200	200	25	4715103-D31
400	400	-	4715132-D31
400	400	100	4715117-D31-01 (or -02)
<b>For Veeco Dimension 5000™</b>			
100	100	-	4715100-D50
100	100	-	4715126-D50
100	100	10	4715128-D50
150	150	10	4715143-D50
200	200	-	4715101-D50
400	400	-	4715132-D50
400	400	100	4715117-D50-01 (or -02)
<b>For Veeco MultiMode™</b>			
100	100	15	4715120-MM



Closed-loop AFM Scanner Upgrades for Research and Industrial Applications



nPoint manufactures ultra-precision motion control tools used in applications ranging from life science to the semiconductor industry.

www.npoint.com  
sales@npoint.com

sales • 608.204.8757  
fax • 608.310.8774

1617 Sherman Avenue  
Madison, WI 53704

"We have purchased a small sample nPoint XY upgrade and the results are astoundingly good for imaging flat surfaces at large scan range. nPoint provides excellent support here in the US."  
 Mark Wendman, when at Nanochip, Dimension™ 3100 user.



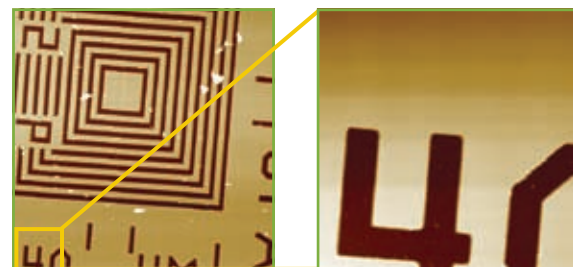
## Why Closed-loop Scanners?



30µm scan of a lithography pattern created by charge deposition on Si sample. An Agilent AFM retrofitted with a 100x100µm nPoint scanner was used. Courtesy of ScienTec (France).



TappingMode™ image of pentacene dendrites on a silicon dioxide substrate acquired with a MultiMode® AFM. Scan size = 11 µm. Image courtesy of Frisbie Group, University of Minnesota.

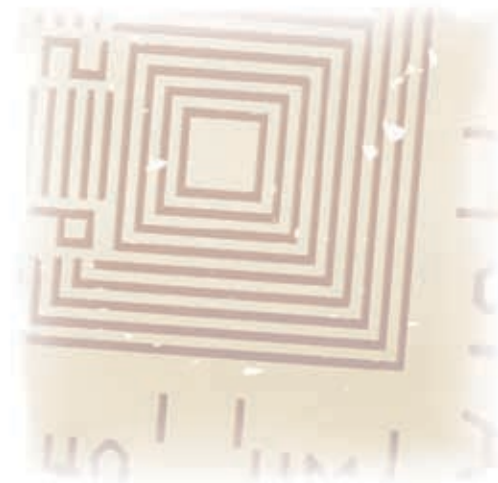


50x50µm and 8x8µm images of a Geller Microanalytical Laboratory standard acquired consecutively using an XY nPoint scanner and a Dimension™ 3100 AFM.

- One-click zooming
- One-click repositioning
- No piezo drift
- Scanning linearity
- Measurement precision

The closed-loop XY and XYZ scanners use real-time position feedback to eliminate piezo-creep and hysteresis. This enables applications, such as lithography, single-molecule force spectroscopy and nanomanipulation. The data acquisition time is significantly reduced due to:

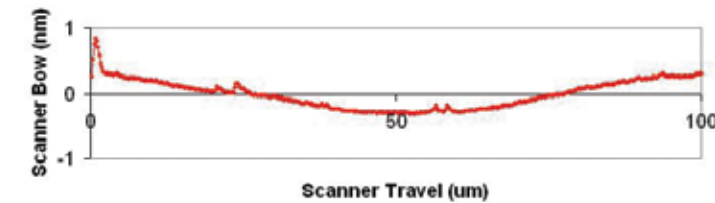
- one-click zooming and repositioning capability
- absence of piezo-creep when large offsets are used or the scan direction is reversed



"The scanner is very useful for our experiments. I can always engage the probe at the same position very easily. It really saves my time to look for the cells. Moreover, the scanner is very stable (almost no drift) even with slow scan rate (0.3~0.4Hz)."  
 Arie Takayuki, NIH, Bioscope™ user



## Why nPoint Scanners?



- Innovative flexure design offers extremely low scanner bow.
- Advanced DSP control algorithms maintain accuracy at high scanning speeds.
- Low-noise electronics maintain the imaging quality AFM users expect.
- Scanning linearity better than 99.95%
- Large scanning ranges create new research/characterization opportunities. With scanning ranges in XY of up to 400µm and 100µm in Z, nPoint scanners enable a wide range of AFM applications.
- Integration takes minutes!

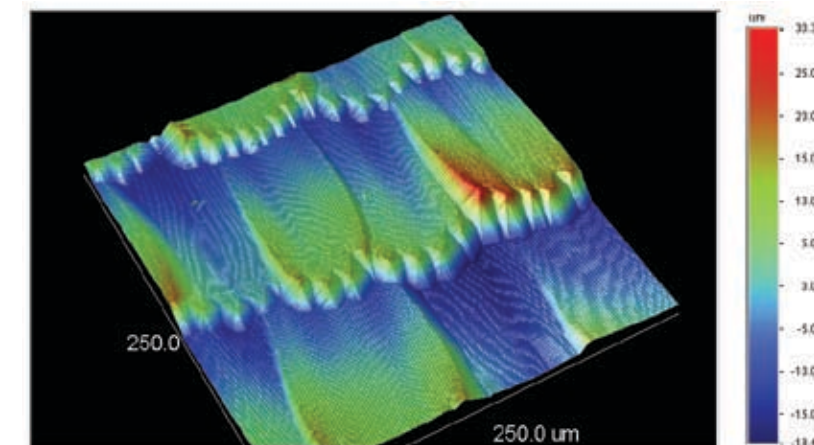
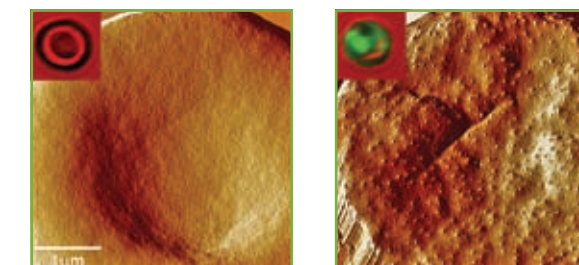


Image taken with nPoint's 400x400x100µm scanner, courtesy of 3M Corporation.



4x4µm images of knobs (left: uninfected, right: infected) acquired using an XY nPoint scanner and the Bioscope™ AFM. The malaria parasite used to infect the knobs is Plasmodium falciparum, MCR+ parasite strain. Image courtesy of NIH.