

原子力顯微鏡 Genie AFM

Performance and affordable solution



產品特色

Key Features and Benefits

原子級解析度 Atomic Resolution

High quality images.

擴充性與客製化 Flexible and Upgradable Design

Full customization support.

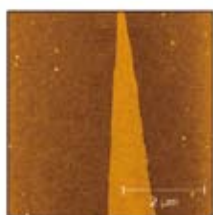
人性化操控介面 Ultimate Easy Setup and Use

User can learn it in a short time.

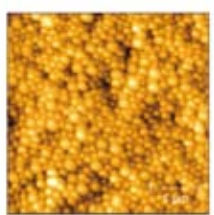
在地技術支援與維修服務 Full Support and Easy Troubleshooting

We offer a remote support to view, diagnose and control user's system over the internet then we can solve user's problems quickly.

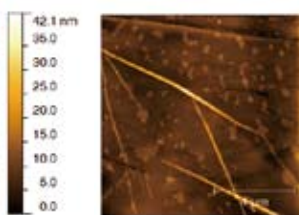
性能表現 超乎想像



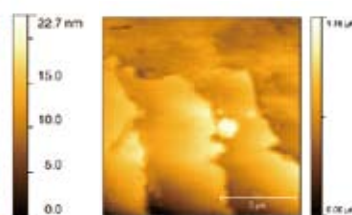
石墨烯
Graphene on silicon



聚苯乙烯小球
Polystyrene spheres



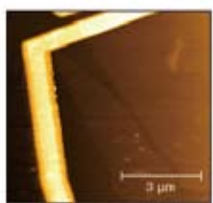
奈米碳管
CNT



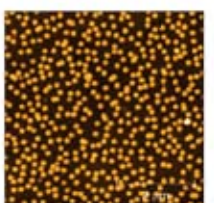
頭髮
Human hair



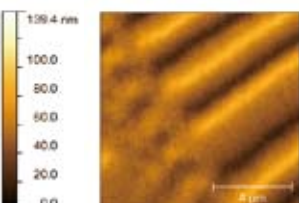
矽晶太陽能電池
Texture surface of solar cell



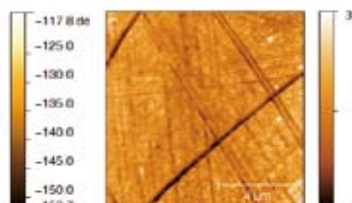
金屬電極與石墨烯
Graphene over metal electrodes



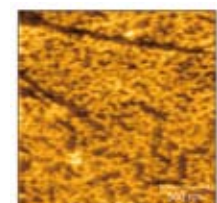
奈米小球
Nano-spheres



硬碟磁區
Hard Disk (MFM)

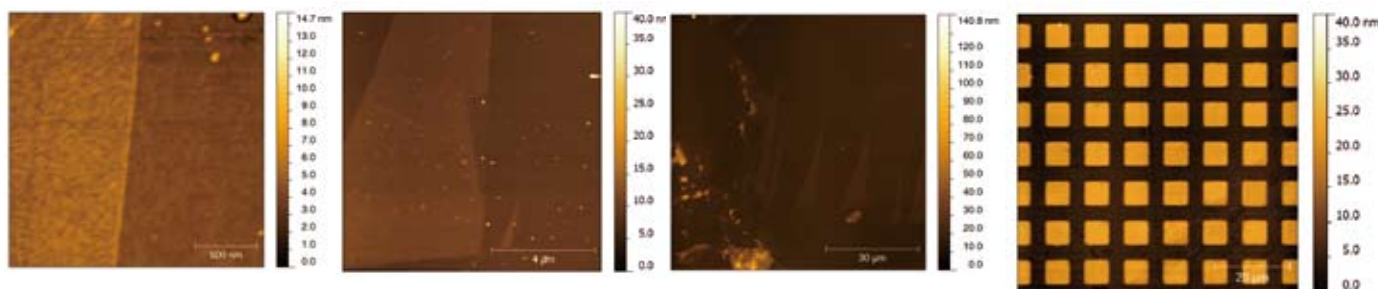


光學薄膜
Thin film



氮化硼
Ultra flat Boron Nitride
Rq=0.1nm

XY scanner



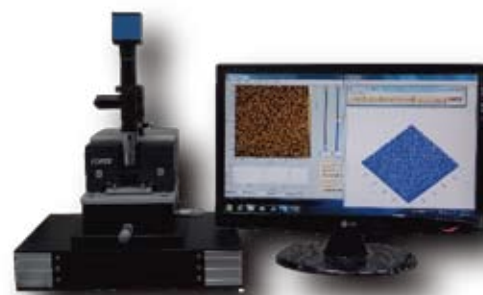
Better precision and accuracy than tube scanner, providing the ability to accurately zoom and offset with one mouse click.

Closed-loop sensors to compensate for inherent piezoelectric imperfections such as scan nonlinearity, creep and hysteresis.

Specification

Functions	
Operation mode	AC mode/ DC mode
Topography imaging	YES
Amplitude/Phase imaging	YES
Force curve chart	YES
Sample/probe approach	Automatic
Scanner	
Scan range	Scanner A: 15 μm × 15 μm × 2 μm* Scanner B: 100 μm×100 μm×10 μm
Background noise *	0.04 nm rms in vertical direction
Lateral non-linearity	1% closed loop scanning
Scan speed	0.1 to 3 Hz
Simultaneous images	4
Electronics	
AD/DA resolution	16-bit
Feedback control platform	Real-time FPGA
Embedded Lock-in amplifier	FPGA based, 1k ~ 1M Hz
Computer interface	RJ45 internet, USB optional
Sample	
Sample size	Ø 2" inch
Sample stage	Manual XY, 12.5mm × 12.5mm
Auxiliary top-view	400× OM + CCD
Software	
Real-time line flatten	YES
Line profile measurement	YES
Roughness measurement	YES
Contrast/brightness	YES
Multiple color palettes	YES
3D image	YES
Line average	YES
Image export	bmp file
Raw data export	txt file
Image size	64 to 4096 pixels
Raw data export	for Matlab, Excel, Gwyddion and WSxM

*Noise level 0.04 nm rms achieved on scanner A.
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Standards

- Stable granite base
- Microscopic camera
- Exchangeable probe holder
- Manual Ø2" sample stage

Available Options

- Active vibration isolation:
Good performance on vibration.
Fastest setup.
- Heating stage:
From room temperature to as high as 400K.

Main Functions

- DC Mode
- AC Mode
- Amplitude/Phase Contrast
- Force Curves

Optional Functions

- Magnetic Force (MFM)
- Electrostatic Force (EFM)
- Conductive AFM (C-AFM)
- Piezo Force (PFM)
- SThM
- I-V Curves

