Atomic Force Microscope

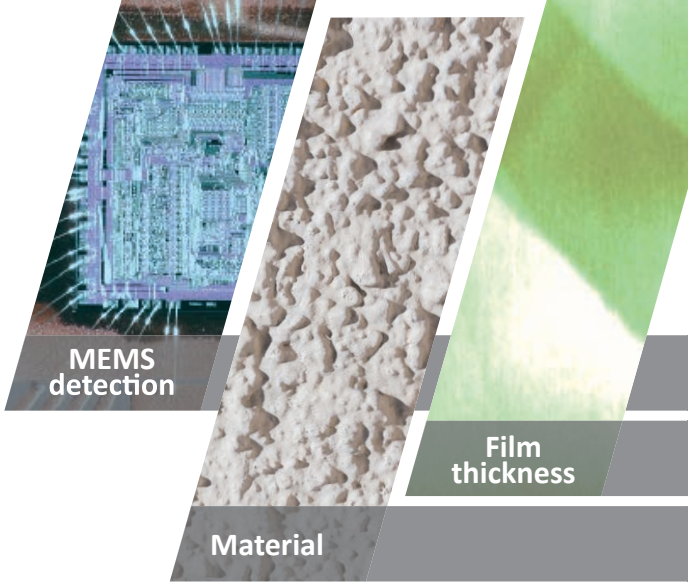
Compact size, Reliable quality, Affordable price,

Best solution, and Innovative design

Suitable for fundamation nano-education and reserches.

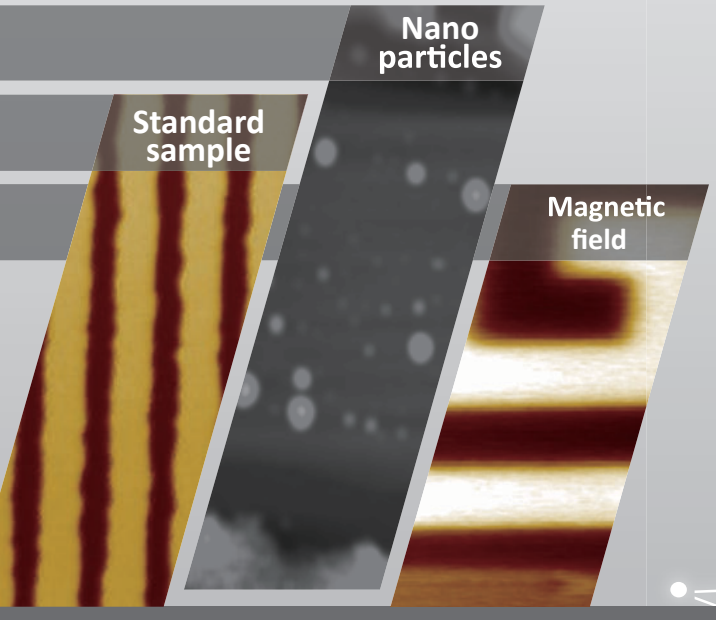
We introduce you the Crabi-AFM.

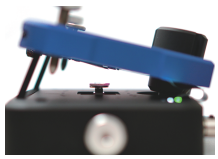
The best budget AFM.



The same image resolution

with 1/5 price & system size





Crabi-AFM-E-01

- Compact size
- Reliable quality
- Affordable price
- Best solution
- Innovative design

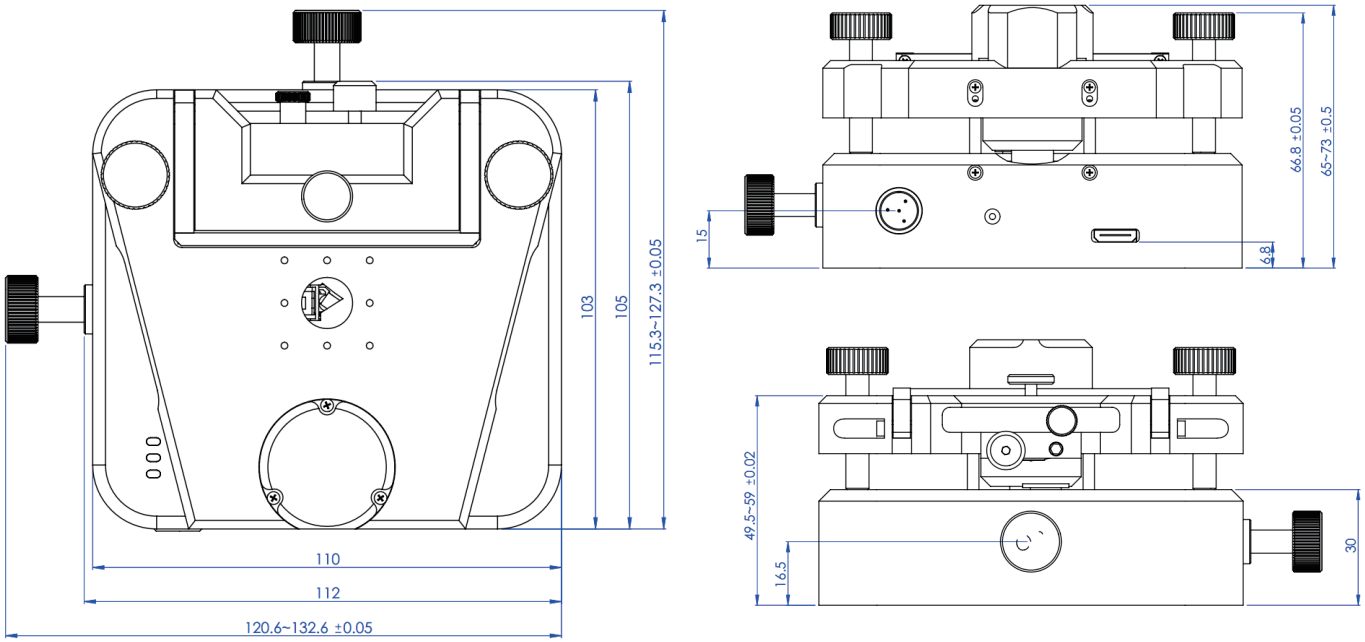
The CrabiAFM system is the most affordable atomic force microscope for nano-education, fundamental research, and related skill training. The patented innovative core technology provides reliable image results with compact system size. The CrabiAFM must be the best solution for your requirements.

Specifications

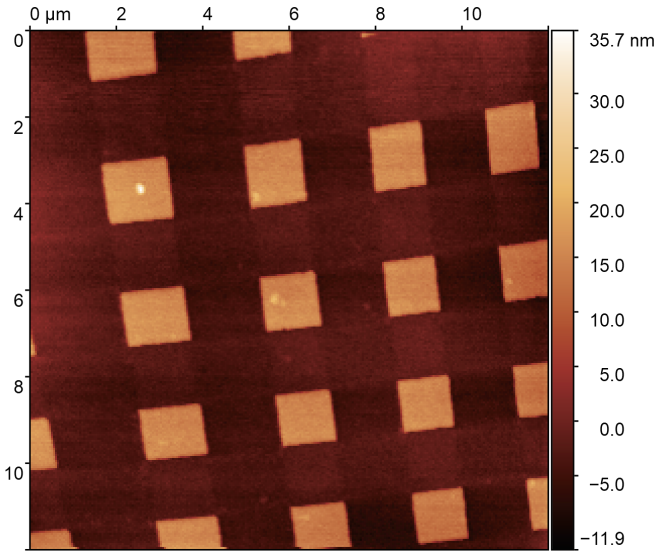
Functions	CrabiAFM-E-01	Unit
DAC/ADC	12	bits
Max. scan range	10	μm
Max. scan height	1.4	μm
XY resolution	2.5	nm
Z resolution	0.35	nm
Scan speed	>2	Hz
Image modes	AC mode, Amplitude error, Phase	--
Spectroscopy modes	Force-distance	--
Max. sample size/height	12/4	mm
Max. sample positioning range	12 in XY	mm
Approach	Auto/ 6 mm	mm
Top image	No	--
Size	110x110x67	mm
Software differences		
Set scanning area angle	Yes	
Set scanning area via resolved image	Yes	
Image display color setting	Yes	

* Core technology patent applying

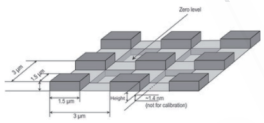
Mechanical drawing



Resolved reference image



Scanning parameters



Scan range: 12 by 12 micron
Scan speed: 1 Hz
Probe frequency: ~300 kHz
Sample: Standard sample from NT-MDT - TGQ1

Sample specification

Grating description	
Structure	- Si wafer
Pattern types	3-Dimensional array of small rectangles
Period	3.0±0,05 µm
Height	20nm ±1,5 nm*
Rectangles side size:	1,5±0,35 µm
Chip size	5x5x0,5 mm
Effective area	central square 3x3 mm

Image Analysis

A free SPM (Scanning probe microscopy) image analyzer is recommended here: **Gwyddion**
It is a modular program for SPM data visualization and analysis. Primarily it is intended for the analysis of height fields obtained by scanning probe microscopy techniques (AFM, MFM, STM, SNOM/NSOM) and it supports a lot of SPM data formats. However, it can be used for general height field and (greyscale) image processing, for instance for the analysis of profilometry data or thickness maps from imaging spectrophotometry.

Refer from: http://gwyddion.net/