CSI

France

Quantum Design
LATIN AMERICA

CS Instruments is specialized in the conception of Atomic Force Microscope and options designed for existing AFM (Nano-Observer AFM, ResiscopeTM, High Voltage Amplifier, Magnetic modules and other to help the scientific community to achieve nanometer performances that meet the research needs and requirements for actual and future nanoscience applications.

The company began by providing the AFM accessories ResiScope which allows the characterization of conductive surface. Today, CS Instruments is proposing a complete AFM microscope.

The Nano-Observer AFM microscope uses an advanced flat scanning stage to avoid well known defects of the piezoelectric tube scanner such as bow, X-Y crosstalk etc. A low noise feedback control delivers reliable and high performance. A patented flexure stage with 3 independent low voltage piezoelectric devices mounted in a massive platform and combined with a low noise laser and electronics achieves high resolution measurement at atomic scale.

Beyond that, the Galaxy Dual controller creates new opportunities for AFM users by combining new features with those already available on your existing AFM. This new controller offers more than a second life to your AFM, it renews and improves the performance with new imaging modes and new intuitive software. The Galaxy Dual USB controller offers a real integrated lock-in for better measurement capability (phase detection, field measurement). Low-noise electronics and power supply coupled to a 24bit drive architecture provides high resolution and smart integration with 5100/5500/Multimode, AFM/STM bases.

Key features:

Nano Observer AFM
- XY scan range: 100 um (tolerance +/- 10%)
- Z range: 15 um (tolerance +/-10%)
- XY drive resolution: 24 bit control – 0.06 A
- Z drive resolution: 24 bit control – 0.006 A

Galaxy Dual
- XY drive resolution: 24 bit control – 0.06 A
- Z drive resolution: 24 bit control – 0.006 A
- Ultra low noise HV: Typ <0.01 mV RMS
- Data points: Up to 8192

Most common applications:

- Nanoscience
- Materials
- Surface science
- Electrical characterization
- Soft sample
- Polymers
- Thin films
- Semiconductors
- Biomaterials
- Photovoltaics
- Conductive surface characterization

BIG AREAS Industries | Materials Science
Microscopy

CSI Concept Scientific Instruments
Atomic Force Microscopes