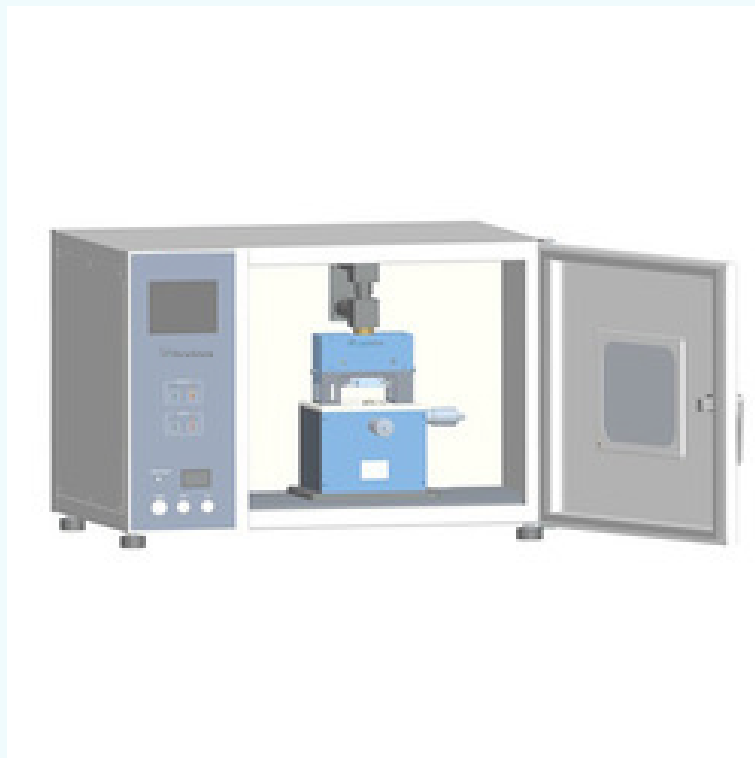




## **Atomic force microscope LD-LAFM-A11**

**Labodam Equipment Ltd.**  
**[info@labodam.com](mailto:info@labodam.com) | [www.labodam.com](http://www.labodam.com)**

# Atomic force microscope LD-LAFM-A11

## Overview

Atomic force microscope LAFM-A11 comes with combined design of scan head and sample stage, to give strong anti-vibration performance. Adopted with servomotor, drives the sample approaching tip manually or automatically, to evaluate precise scanning area position. Equipped with precision laser detection and probe alignment device, make easy adjustment of laser beam.

## Features:

- Large sample transfer range
- Optical observation system for checking tip & sample's position
- Modular electronic system for easy maintenance
- CCD observing system
- Equipped with servomotor to achieve CCD auto focusing
- Provides highly accurate results

## Applications:

It finds best solution for applications in biochemistry for tissues, cells, cellular components imaging, nanotechnology for imaging of polymers, nanomaterials, and in chemistry physics for imaging of surface metals elements.

## Specifications:

|                         |                                                                                              |
|-------------------------|----------------------------------------------------------------------------------------------|
| <b>Scan rate</b>        | 0.6 Hz to 4.34 Hz                                                                            |
| <b>Net weight</b>       | 50 kg                                                                                        |
| <b>Resolution</b>       | X/Y axis: 0.2 nm, Z axis: 0.05 nm                                                            |
| <b>Scan angle</b>       | 0 to 360°                                                                                    |
| <b>Sample size</b>      | Ø? 90 mm, H? 20 mm                                                                           |
| <b>Gross Weight</b>     | 87.4 kg                                                                                      |
| <b>Feedback type</b>    | DSP digital feedback                                                                         |
| <b>Operation modes</b>  | Contact mode, friction mode, extended modes of tapping phase, MFM, EFM, scan angle 0 to 360° |
| <b>PC connections:</b>  | USB 2.0                                                                                      |
| <b>Sample movement</b>  | 0 to 20 mm                                                                                   |
| <b>Scanning control</b> | XY: 18 bit D/A & double 16 bit A/D multiple channel simultaneously                           |
| <b>Windows software</b> | Compatible with windows 98/2000/XP/7/8                                                       |

|                                             |                                                      |
|---------------------------------------------|------------------------------------------------------|
| <b>Maximum scan range</b>                   | X/Y axis: 50 $\mu\text{m}$ , Z axis: 5 $\mu\text{m}$ |
| <b>Instrument Diemnsion</b>                 | 700 $\times$ 500 $\times$ 460 mm                     |
| <b>Feedback sampling rate</b>               | 64 KHz                                               |
| <b>Types of sampling pixel</b>              | 256 $\times$ 256, 512 $\times$ 512                   |
| <b>Pulse width of approaching motor</b>     | 10 $\pm$ 2 ms                                        |
| <b>Optical system/ Magnification of CCD</b> | Magnification: 10x, Resolution: 1 $\mu\text{m}$      |