

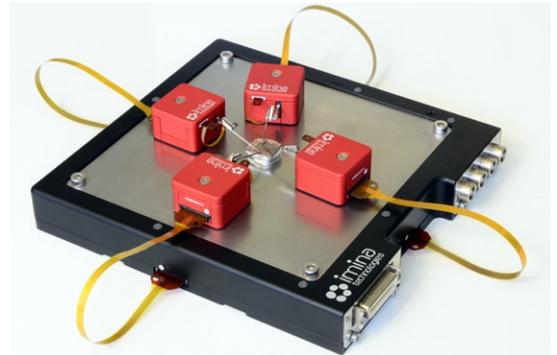
miBot™ platforms

Positioning, handling, sensing... every application has different requirements. The miBot adapts.

The miBot is an extremely versatile piezo-based manipulator which can be used in combination with various third party instruments to position probe tips on electronic devices and MEMS, or to handle and characterize nanoparticles and biological samples. In order to adapt to these multiple use-cases, Imina Technologies divides its offering into three main product lines with a high level of upgradability between each other. Whatever is your microscope, the size of your samples, and the type of operations you would like to carry out with your miBots, there is a platform for you.

Portable. Plug and start getting results.

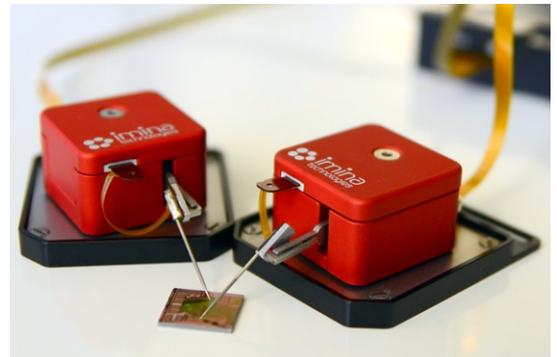
Ideal for labs with shared equipment, the miBase BS-43 makes installation and use of your miBots extremely convenient. The platform accommodates samples up to 5 cm (2") diameter. It offers several mounting interfaces that fit most optical and electron microscopes, and moving from one to another is a matter of minutes. It embeds a MultiBot controller which allows you to run up to 4 miBots with a single piezo driver (syDrive SD-15) and cabling is reduced to the minimum. Electrical signals can be measured or injected at the miBot probe tips by third party instruments by connecting them to the coaxial connectors on the front panel.



miBase BS-42 with four miBot manipulators

Compact. Seamless integration with your equipment.

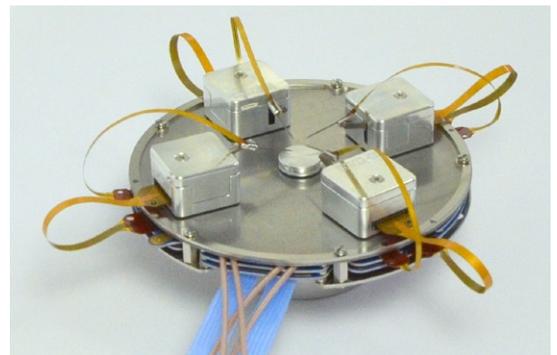
Take full advantage of the ultra-small miBot size with platforms specifically designed to minimize their footprint on cluttered experimental setups and environmental chambers. The compact stages are available in various shapes and dimensions that accommodate 1, 2, or 4 miBots. Their mounting interfaces are compatible with standard optical breadboards and microscope stages, allowing you to easily reconfigure your setup for new experiments. Not directly attached to the sample, these stages are ideal for use at low optical working distance. They are also well adapted to contact large substrates mounted on sample holders that are moved by a positioning stage (e.g. wafer chucks, Petri dishes).



Two miBots on separate 1-Bot stages

Nanoprobing. Low current measurements in SEM.

The nanoprobing platform is a unique solution that turns the miBot nanomanipulators into powerful nanoprobbers for in situ electrical characterization of semiconductor devices and advanced materials in SEM. Carefully designed to minimize interferences with measuring signals, leakage currents can be as low as 100 fA/V. Shielded cabling connects each probe from the stage to industry standard feedthrough connectors. This platform allows you to position independently up to 4 probes over a workspace of several millimeters with a resolution up to the nanometer. Last but not least, the stage compact design makes this solution accessible even to those whose microscope has a small vacuum chamber.



Nanoprobing platform for in situ electrical characterization in SEM/FIB

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