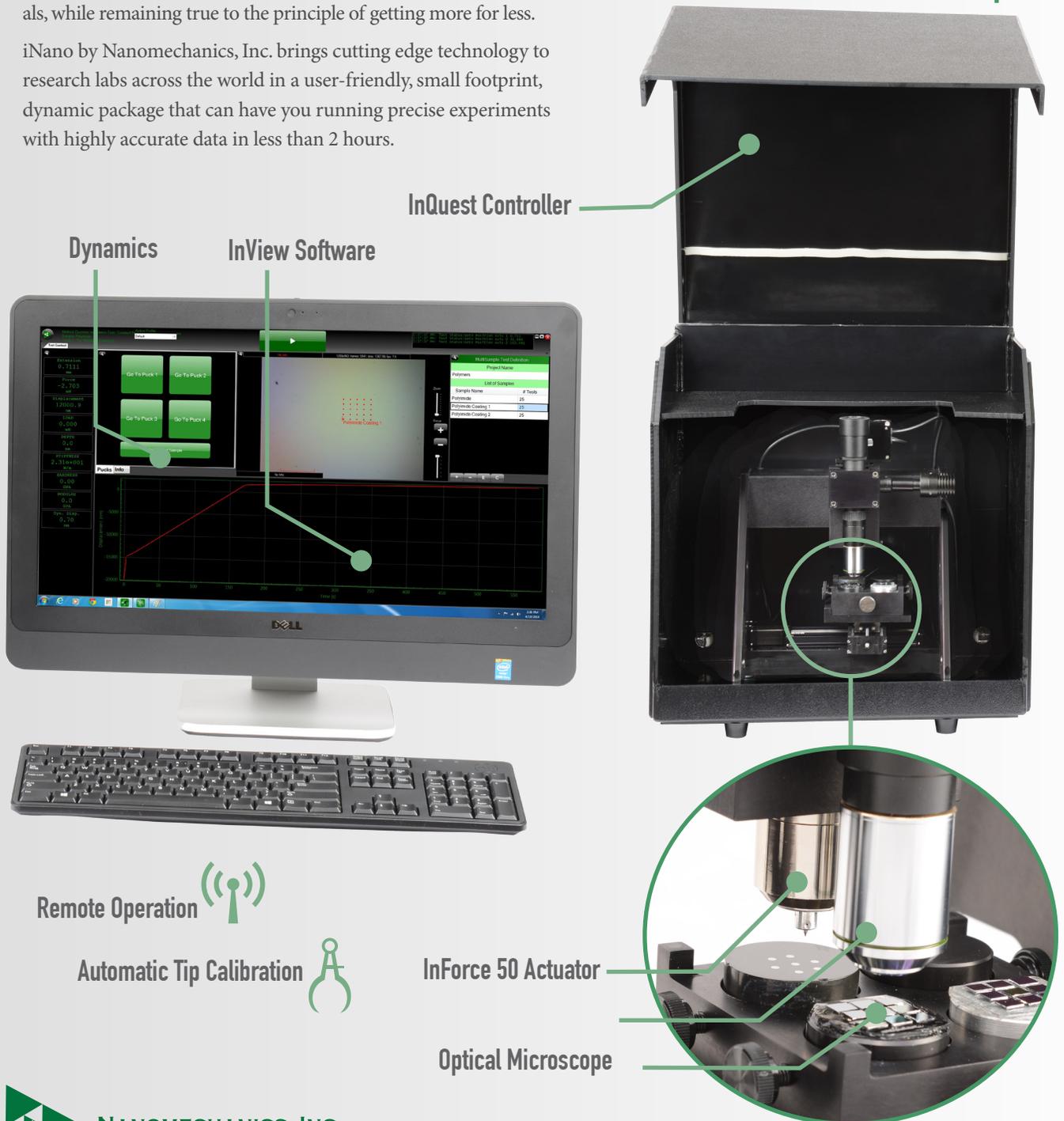


iNano™ Nanoindenter

The iNano™ nanoindenter is made easy and affordable by offering **repeatability, accuracy and precision** at a price that puts nanoindentation capability into reach for any lab's budget, from leading universities to high tech companies.

By offering the highest performing and most capable mechanical characterization microprobe on the market, at an affordable price, we offer our customers the capability to perform accurate testing on a wide range of materials, while remaining true to the principle of getting more for less.

iNano by Nanomechanics, Inc. brings cutting edge technology to research labs across the world in a user-friendly, small footprint, dynamic package that can have you running precise experiments with highly accurate data in less than 2 hours.



iNano Capabilities

Ease of Use

Every element of the iNano is designed to provide lab technicians and researchers with an easy-to-use tool for characterizing their materials and products. From its innovative magnetic sample loading system to its industry leading software, iNano makes experiments simple and allows for mistake-free, high throughput mechanical testing that is required by today's leading labs.

By eliminating the need for advanced test setup and complicated software exchanges, iNano is perfect for the first time user looking to prove their product or the seasoned scientist trying to unlock the best data for their research all while offering the best quality data available on the market. iNano was built with the simple purpose of keeping world-class nanoindentation simple.



Great Return on Investment

For users in industry, the important question is always "how will my lab tools make me money?" iNano answers the call by providing a device for characterizing both materials and products to give researchers the capability to control the quality, characteristics and performance of their products. Its cost effective design allows labs to stretch their budgets by eliminating the need to use third party contract laboratories to get the data they need, and allows for an unlimited number of tests to be done in-house. This also eliminates the lengthy time delays of shipping samples and waiting for results.

High Performance

Researchers worried that an easy-to-use, affordable nanoindenter is a de-tuned tool can rest assured that iNano is not. iNano uses leading edge technology developed by the inventors of the nanoindenter and provides for world-class specifications and best-in-industry performance. With Data Acquisition Speeds of 100 kHz and industry leading 20 micro second time constants, iNano not only gives you the best data but also the most data points per dynamic experiment. With 50 mN of force and 60 microns of displacement, iNano also offers the best possible range of experiments and applications.

Flexible Applications

Whether you are a scientist in an industrial laboratory or a researcher in an academic environment, iNano provides a wide range of applications including:

- Thin films, coatings and surface treatments
- Metals, ceramics and polymers
- Composites
- Biomaterials
- MEMS

Multi-Purpose Instrument

With flexibility in mind, iNano allows for a wide range of tests including, but not limited to:

- Frequency specific experiments
- Storage and loss modulus
- Modulus and Hardness (Oliver and Pharr)
- Constant Strain Rate

Robust Design

Downtime is a killer and iNano helps you avoid it. Built to be tough and forgiving, iNano's design will hold up for test after test, giving you the confidence to run your system like you run your lab: at maximum capacity. With an industrial aluminum gantry, capable high force actuator and reliable software, iNano won't let you down when your research needs require high accuracy experiments or long-term repeatability.



ACTUATOR SPECS

| | |
|--------------------------------------|------------------|
| Displacement measurement | Capacitive Gauge |
| Displacement range | 50 microns |
| Displacement resolution (electronic) | 0.0002 nm |
| Typical noise | < 0.1 nm |
| Load application | Electromagnetic |
| Time constant (displacement) | 20 μ s |
| Maximum Load | 50 mN |
| Load resolution | 3 nN |

CONTROLLER SPECS

| | |
|--------------------------------|-----------------------|
| Data Acquisition Rate | 100 kHz |
| Closed Loop CPU Control Rate | 1 kHz |
| Time Constants | 10 μ s and higher |
| Dynamic Excitation Frequencies | 0.1 Hz – 1 kHz |

Contact Nanomechanics Inc. today to find out how you can add the capabilities of nanoindentation to your lab in as little as 3 days.



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