Compact benchtop robot perfect for automating a variety of workflows

Orbitor RS2 Microplate Mover
The ultimate laboratory workhorse

If you are looking for an easy-to-use, flexible, and reliable mover, the Thermo Scientific™ Orbitor™ RS2 microplate mover will bring tremendous increases to your lab’s productivity.

The Orbitor RS2 is a collaborative bench-top mover that provides unbeatable reliability and improved process efficiency. Its innovative bi-directional telescoping arm coupled with its expansive 360° workspace provide exceptional reach and precision, making the Orbitor RS2 your trusted laboratory productivity partner.

Designed with you in mind
- Integrated barcode reader enables sample tracking, barcode transmission and inventory management
- Plate detection in the gripper helps to eliminate labware handling errors and reduces the risk of lost samples
- Variable force settings make it compatible with many plate types for a variety of applications

Safe and collaborative
The Orbitor RS2 meets the rigorous international standards for collaborative robots, so, lab personnel can work alongside the RS2 in a defined, purpose built workspace without guarding or shielding. Novice and experienced automation users also appreciate the Orbitor RS2’s range of integrated safety features. The overhead gripper in the arm avoids the possible issues of protruding off-set fingers used by other movers, with force-controlled stops at the slightest unexpected contact. In addition, the Orbitor’s quiet operation minimizes environmental noise, an issue which arises with many other products on the market.

Momentum scheduling and workflow software
The Orbitor RS2 solution is controlled and monitored with the Thermo Scientific™ Momentum™ scheduling and workflow software. Momentum is the top layer software that communicates and controls the other instruments on the system as well as the Orbitor. Momentum lets users define, execute and monitor complex processes in a powerful, yet easy-to-use visual environment. The software has a simulation mode which allows the user to test and optimize their processes in advance. Momentum software provides recovery options for attended or unattended modes to keep your science moving. This revolutionary software can even run multiple processes at the same time, the possibilities are endless!

Develops with your needs
The Orbitor is one of the most flexible movers in the market. Users often invest in the Orbitor RS2 for single instrument loading and later add additional instruments and integration. Orbitor solutions can easily be upgraded in the field, either adding multiple devices for operation pooling or with sample preparation instrumentation. It also provides a wide selection of plate storage options, with combinations of sequential access stacks or random access hotels and storage carousels. Orbitor RS2 can also be placed on a track axis to capture even more of your evolving workflow.
A perfect pairing…
The Orbitor RS2 microplate mover meets the Applied Biosystems™ QuantStudio™ 7 Pro Real-Time PCR system.

QuantStudio 7 Pro Real-Time PCR system
- Personalized—automatic load settings and facial authentication
- Efficient—Smart Help and Smart Remote Support
- Simple—intuitive touchscreen

Orbitor RS2 microplate mover*
- Unmatched speed & accuracy—with collision detection and recovery
- Collaborative—360° workspace, random access or stacked
- Reliable—integrated barcode scanning, optical sensor, easily handles lids

* Also compatible with the Applied Biosystems QuantStudio 7 Flex and the Applied Biosystems QuantStudio 12K Flex systems. The Applied Biosystems QuantStudio 6 Flex and Applied Biosystems QuantStudio 6 Pro systems can be upgraded (at an additional cost) to support automation.

This dynamic pair will deliver improved workflow and smarter productivity. They work together seamlessly to dramatically increase your sample throughput.

With many more possibilities…
Build the workflow you need by selecting from a range of automation-ready instruments.

Thermo Scientific™ KingFisher™ Flex Purification Systems
Thermo Scientific™ KingFisher™ Presto Purification Systems
Thermo Scientific™ Varioskan™ LUX Microplate Reader
Thermo Scientific™ Multiskan™ FC Microplate Reader

Applied Biosystems™ Automated Thermal Cycler
Invitrogen™ Attune™ NFX Flow Cytometer
Thermo Scientific™ Multidrop™ Combi Reagent Dispenser
Thermo Scientific™ Cellinsight™ HCS Platforms
Thermo Scientific™ Luminex™ Protein Analysis Platforms

The Orbitor RS2 microplate mover can be the centerpiece of various high-throughput automation operations.
Discover your Orbitor RS2 microplate mover today

Workflow solutions for automating science
Life science researchers looking to improve workflows or increase efficiency rely on our industry-leading automation solutions of robotic movers, automated incubation, collaborative systems and workflow scheduling software. Whether automating a single step or an entire workflow, our laboratory solutions deliver increased walk-away time, improved reproducibility and productivity without compromising data quality, allowing our customers to focus on their science.