The Thermo Scientific Orbitor RS2 is an upgraded, compact bench top mover with integrated barcode scanning for greater flexibility. Its innovative bi-directional telescoping arm provides exceptional reach and precision while its expansive 360° workspace makes it a great laboratory productivity partner. This reliable, simple and collaborative robot easily accesses the most complicated instruments and increases efficiency as the centerpiece of various high-throughput applications.

Efficient and Reliable
The Orbitor RS2 is a compact platemover with unmatched speed and accuracy. The integrated barcode scanner enables sample tracking, barcode transmission and inventory management. While the plate detection in the gripper helps to eliminate labware handling errors and reduces the risk of lost samples. Built upon our heritage of robotics leadership and integration expertise, the Orbitor RS2 is a sound, reliable investment for any lab.

Develops with your needs
Because it is one of the most flexible movers in the market, users often invest in the Orbitor RS2 for single instrument loading and later request additional instrumentation 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.

Designed for Safety
Orbitor RS2 is inherently safe, so can work in direct cooperation with a person in a defined, purpose built workspace without guarding or shielding. Not only does it meet the rigorous international standards for collaborative robots, novice and experienced automation users also appreciate the Orbitor RS2’s range of integrated safety features.

The overhead gripper in the arm naturally avoids the possible issues of protruding off-set fingers used by other movers, and force control stops all movement at the slightest contact.

Maximises uptime
We have flexible post-warranty support options which help users avoid the lengthy hassles of mover diagnostics and repair.
## Thermo Scientific Orbitor RS Specifications

### Axis/Joint Specifications

<table>
<thead>
<tr>
<th>Axis</th>
<th>Range</th>
<th>Velocity</th>
<th>Acceleration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z (height)</td>
<td>575mm</td>
<td>750mm/sec</td>
<td>2250mm/sec²</td>
</tr>
<tr>
<td>Radius (reach)</td>
<td>±406mm</td>
<td>200mm/sec</td>
<td>3600mm/sec²</td>
</tr>
<tr>
<td>Theta (rotation)</td>
<td>Infinite</td>
<td>225deg/sec</td>
<td>675deg/sec²</td>
</tr>
<tr>
<td>Gripper Stroke</td>
<td>51mm</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### General Specifications

- **Power Requirements**: 110-230V auto switching
- **Operating Environment**: 4 - 40°C, non-condensing
- **Safety Compliances**: CE, CSA
- **Weight**: 25kg
- **Motion Control**: Closed Loop Servo, Brushless AC Motor
- **Control**: Directly from PC, requires Windows 7 or 10 operating system.

### Storage Options

**Hotels**
- Random Access: 8 plates per hotel
- Sequential Access: 40 plates per hotel

**Maximum Capacity with Hotels**
- Random Access: 72 plates
- Sequential Access: 360 plates

### Gripper Details

- Handles most SBS- standard labware
- Landscape or Portrait
- Easily handles lids
- Plate detection in the gripper
- Adjustable gripping force and speed settings
- Compatible with many plate types

Find out more at [thermofisher.com/OrbitorRS2](http://thermofisher.com/OrbitorRS2)

For Research Use Only. Not for use in diagnostic procedures. © 2018 Thermo Fisher Scientific Inc. All rights reserved. All trademarks are the property of Thermo Fisher Scientific and its subsidiaries unless otherwise specified. SPEC-LA-ORBR52-0318