

ARI Scorpion for Chemistry

The speed and versatility of the Scorpion make it the ideal choice for synthetic chemists to automate High-Throughput Experimentation in your lab. With the Scorpion, a synthetic chemist will see a 10-fold increase or more in the number experiments being run.



The Scorpion can access 6 deck positions with a minimal footprint. The unique lightweight and durable delta arm design allows for an open work space. The high speed arm movements increase throughput and facilitate the transfer of solvents without dripping. The enclosed work space can be filled with gas to create an inert environment.

Features

- 10-fold increase or more in the number of experiments that can be setup versus a manual workflow.
- Small foot print fits into standard sized fume hoods.
- Enclosed workspace and airflow system allow for an inert atmosphere to be created so sensitive reagents can be used with confidence.
- Liquid level sensing allows the tip to follow liquid levels, improving aspirate and dispense accuracies.
- Single channel head and optimized dispense modes make it easy to work with a wide range of solutions.
- Intuitive and easy to use software makes setting up complex experiments a simple task.
- The single channel head design allows the Scorpion to access any type of tube, vial, or plate.
- Work safer, limit lab personnel exposure to solvents.

The open design of the workspace and powerful software allow the system to be configured for virtually any type of labware. Dram tubes, glass vials, deep well blocks, and many others.

Applications:

- High-Throughput Experimentation.
- Reaction optimization.
- Reaction miniaturization to screen conditions without wasting precious sample.
- Long term scheduled reaction sampling for kinetic assays.
- High-throughput screening of ligands or substrates for reactions.

The Scorpion can automate the slow and tedious task of manually setting up reactions one-by-one. The Scorpion can perform your High-Throughput Experimentation set-ups and greatly improve throughput while you spend your time analyzing your results and not at the bench.

A typical work flow example using the Scorpion for High-Throughput Experimentation is shown below. Let the Scorpion do the tedious work for you with precision and accuracy.

Reaction Set-up	<p>Scorpion – Add stock solution into reactor plate. Work can be done in an inert atmosphere.</p> <ul style="list-style-type: none"> Seal and remove plate. Process Plate: stir/heat/chill/irradiate.
Reaction Work-up	<p>Scorpion – Add aqueous quench solution</p> <p>Scorpion – Mix each well using an aspirate and dispense sequence.</p> <ul style="list-style-type: none"> Wait for layer separation. <p>Scorpion – Sample either top or bottom layer.</p>
Prepare LC MS Samples	<p>Scorpion – Transfer sample from reaction well into LC-MS pate.</p>

Workflow provided by: Dr. Bryony Elbert
Late Stage Functionalization Group, University of Oxford

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Order Information

CAT # 640-1000-10
Desktop computer with software

Specifications

Size	19 x 19 x 27.5 in 48.3 x 48.3 x 69.8 cm
Weight	90 lbs, 41 Kg
Electrical	100 to 240 V, 300 W
Environment	4° to 70° C, Non-condensing

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