



Reaction Stations

Electrothermal's range of reaction stations are designed to offer scientists improved accuracy and repeatability of experiments. Multiple reactions in one piece of equipment not only take up much less bench space and use smaller sample volumes but also use less energy. This complements green and lean lab practices whilst increasing productivity.

They can be used for a wide range of applications from simple synthesis to process optimisation.



STEM
INTEGRITY 10

Cell No x
Stored Experiments
Cell Number: Cell 1
A. Chemist
Reactant Name: React 1 at 22 Ce
None
Concentration: 0.0002 mg/ml
None
Position: Use only formulated



RS Series Reaction Stations

Heating, Stirring Models

- Powerful magnetic stirrers under every position
- Stirring speeds from 400 to 2000rpm
- Soft start ramp feature to minimise splashing
- Excellent temperature uniformity across the block
- Temperature stability of $\pm 0.5^{\circ}\text{C}$
- Digital readout of temperature
- Well insulated for maximum heat transfer to sample
- PTFE coating on block to protect against chemical spills
- Compact footprint
- Robust design for heavy usage
- Manual local control or external control by RS232/RS485
- Ideally suited for incorporation onto robotics platforms



Ten Position Model

RS1000 Reaction Station

- 10 position reaction station with 25mm diameter wells
- Sample sizes up to 25ml
- Touchpad temperature and stirring control
- Port for temperature probe to allow contents control
- Only 300W energy consumption

Part Number	Voltage	Dimensions, mm	Weight
PS80010	230V	80 x 150 x 305	4 kg
PS80033	115V	80 x 150 x 305	4 kg

Fifty Position Model

RS5000 Reaction Station

- 50 position reaction block with 25mm diameter wells
- Sample sizes up to 25ml
- Only 800W energy consumption

Part Number	Voltage	Dimensions, mm	Weight
PS80050	230V	250 x 145 x 460	13.8 kg
PS80037	115V	250 x 145 x 460	13.8 kg

Automation. Flexibility. Performance. Electrothermal.



Six Position Model RS600 Reaction Station

- 6 position reaction block with 57.5mm diameter wells
- Sample sizes up to 250ml
- Only 600W energy consumption

Part Number	Voltage	Dimensions, mm	Weight
PS80034	230V	248 x 312 x 157	10 kg
PS80043	115V	248 x 312 x 157	10 kg



Heating, Shaking Model RS9000 Reaction Station

- Interchangeable reaction blocks to accept, microtitre plates, Eppendorf tubes, test tubes or boiling tubes
- Orbital shaking with agitation speeds of 100-600rpm
- Soft start ramping to minimise splashing
- Temperature range of ambient +5°C to 150°C
- Illuminated hot warning symbol stays on even when the unit is switched off
- Touchscreen operation with a sealed anti-glare coating
- Auto-park feature returns block to its original position
- Robust design for heavy usage with compact footprint
- Manual control or external control by RS232/RS485 ports
- Ideally suited for incorporation onto robotics platforms
- Port for temperature probe to allow contents control
- Only 900W energy consumption

Part Number	Voltage	Dimensions, mm	Weight
PS80050	230V	250 x 145 x 460	13.8 kg
PS80037	115V	250 x 145 x 460	13.8 kg

Part Number	Description
PS80052	Reaction Block for test tubes, 96 x 16mm OD
PS80064	Reaction Block for test tubes, 40 x 24mm OD
PS80114	Reaction Block for 96 x 1.5ml eppendorf tubes
PS80074	Reaction Block for 4 x standard microtitre plates
PS80047	Reaction Block for 4 x PTFE microtitre plates
AZ140940	Temperature probe (external)

Omni Reaction Stations

Modular stations which come supplied as complete kits for simultaneous heating, stirring and refluxing under an inert atmosphere. Designed to facilitate easy, efficient and effective parallel synthesis and increase throughput in any chemistry lab.

Omni Reaction Stations

OS1025, OS6050, OS6100 and OS6250

- 10 or 6 position versions
- Temperature range from -30°C to 220°C *when using optional cooling plug
- In block heaters provide effective, uniform heating across the block and prevent 'hot spots'
- Unique airflow through heater cartridge prevents the outer casing from getting hot & therefore reduces the risk of burns
- Magnetic stirring from 100rpm to 800rpm
- Reflux/inerting block provides effective refluxing without the need for unwieldy condensing columns
- PTFE caps with septum allow sampling/dosing and are chemically resistant
- Optional cooling plug extends the temperature range down to -30°C and allow controlled cooling without the need for an ice bath
- Easily programmable using digital touchpad interface
- Temperature probe for contents temperature control is included





Kit includes


- Digital Base Controller
- Heating block – 6 or 10 position
- Glassware
- Reflux/inerting block
- Temperature probe
- PTFE Inerting caps

Part Number	Description	Voltage
OS1025	10 x 25ml position Omni,	230V
OS1025X1	10 x 25ml position Omni,	115V
OS6050	6x 50ml position Omni,	230V
OS6050X1	6 x 50ml position Omni,	115V
OS6100	6 x 100ml position Omni,	230V
OS6100X1	6 x 100ml position Omni,	115V
OS0250	6 x 250ml position Omni,	230V
OS0250X1	6 x 250ml position Omni,	115V
ATS10114	Cooling plug for 10 position Omni	
ATS10112	Cooling plug for 6 position Omni	

Automation. **Flexibility.** Performance. Electrothermal.

Integrity 10

The premium model in the range allows the control of each cell completely independently of all other cells. It is a very time efficient way of conducting chemical experiments, speeding up investigative chemistry by up to 10 fold. It can be very useful for establishing the optimal reaction conditions of many industrial chemical processes and can also aid in pinpointing the cause of process malfunctions due to temperature.

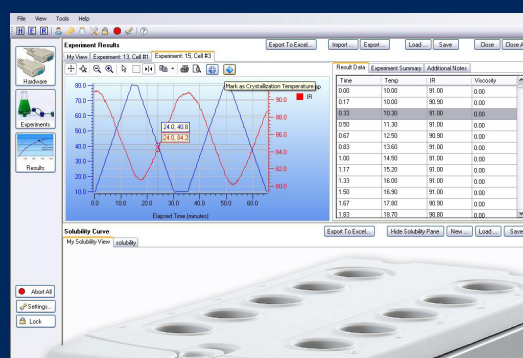
 Electrothermal

STEM
INTEGRITY

Key features

Integrity 10

- Excellent temperature and stirring accuracy
- Temperature range of -30°C to 150°C
- Stirring range from 350rpm to 1200rpm
- A range of glassware accessories for sample volumes from 1ml to 25ml
- Storage capability to save methods and results
- Experiment results can be saved internally or exported via USB
- Optional PC software for increased functionality
- Accessories for refluxing/inerting, contents temperature control and IR measurements
- Suitable for applications from synthesis to process optimisation and scale up



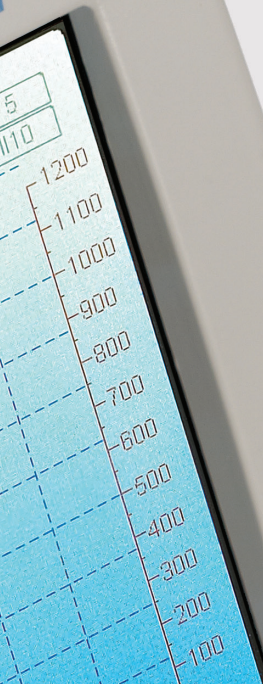
Automation. Flexibility. Performance. Electrothermal.

Flexibility & Accuracy

The Integrity 10 enables 10 experimental variants to be ran simultaneously within the same unit. Not only can a set temperature or stir rate be programmed but the Integrity 10 also allows the set up of temperature profiles which include parameters such as ramp rate, hold time and number of cycles.

Profiles can be stored on the units' internal memory to allow faster set up times with subsequent use. Results can also be stored with information regarding the reaction composition, experiment owner, concentration and the name of the profile. All data is saved with a date stamp.

7 10



Part Code	Description	Part Code	Description
PS20000	Integrity 10 with 10 individually controlled cells, UK , US & EU power leads	AZS4235	Stirrer bars 12/ 4.5mm, pack of 10
ATS20100	Integrity 10 reflux/inerting unit	ATS10001	Multi-Temp 10 plug-in box
ATS20002	SVL 22 thread inerting caps for use with ATS20100	ATS10027	Temperature probe, pack of 6
ATS10075	Glass tubes 24/ 150mm, SVL 22 thread pack of 10	ATS10027/10	Temperature probe, pack of 10
ATS20003	Kimble thread inerting caps for use with ATS20100	ATS11005	Integrity software
ATS20004	Kimble thread 24/ 150mm glass tube compatible with ATS20003	ATS10360/ 1	Non Intrusive IR sensor, pack of 1
ATS10055	Small volume test tubes 24 - 16mm taper (3ml) x10	ATS10230	Small Intrusive IR probe in stainless steel PID-NIR5-BNSD, pack of 1
ATS10209	Small volume test tubes 24 - 11mm taper (1ml) x10	ATS10394/ 1	Large Intrusive IR and NIR probe pack of 1
ATS10056	Reducing sleeves for ATS10055 x10	ATS10232E	Multi IR plug-in box
ATS10101	Reducing sleeves for ATS10209		
AZS4206	Stirrer bars 10/ 6mm, pack of 10		



AT10394/1

RS Reaction Stations



Model	RS600	RS1000	RS5000	RS9000
Number of positions	6	10	50	N/A
Maximum temperature	250°C	150°C	150°C	150°C
Minimum temperature	Ambient +5°C	Ambient +5°C	Ambient +5°C	Ambient +5°C
Sample volume at each position	100-250ml	1-25ml	1-25ml	
Power consumption	600W	300W	800W	900W

OMNI



Model	OS1025	OS6050	OS6100	OS6250
Number of positions	10	6	6	6
Maximum temperature	220°C	220°C	220°C	220°C
Minimum temperature	-30°C	-30°C	-30°C	-30°C
Sample volume at each position	1-25ml	50ml	100ml	250ml
Power consumption	500W	600W	600W	600W

Integrity



Model	Integrity 10
Number of positions	10
Maximum temperature	150°C
Minimum temperature	-30°C
Sample volume at each position	1-25ml
Power consumption	1100W



Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.



UK Office

Keison Products,

P.O. Box 2124, Chelmsford, Essex, CM1 3UP, England.

Tel: +44 (0)330 088 0560

Fax: +44 (0)1245 808399

Email: sales@keison.co.uk

Please note - Product designs and specifications are subject to change without notice. The user is responsible for determining the suitability of this product.