



# Hotplate Stirrers

with BioCote® antimicrobial protection

Stuart introduces the stylish and economical range of Undergrad, general purpose hotplate stirrers. The Undergrad range has been designed with safety as well as performance in mind, with an innovative LED temperature indicator scale and a "Hot" warning light which stays on, even when the hotplate is switched off and unplugged from the mains.

The specifically designed chassis takes up less bench space, makes storage easier and allows for a retort base to fit underneath.



## Undergrad Hotplates

The Stuart® range of Undergrad hotplates includes dedicated hotplates and stirrers as well as combination hotplate stirrer models, the majority of which are available in a choice of ceramic or coated metal tops. All surfaces are square to allow more flexibility in vessel sizes and combinations, for example four 250ml beakers can easily be accommodated.

## Key features

- LED temperature indicator
- Choice of glass ceramic or ceramic coated metal surface
- Hot warning light, remains active even when unplugged
- Compact design to save bench space
- Units can be stored on side, minimising required storage space
- Design allows retort base to slide underneath
- Compatible with SCT1 temperature controller



## LED Temperature indicator



All hotplate models in the Undergrad range feature a true °C temperature setting, rather than a 1 to 10 arbitrary scale. The LED temperature indicator surrounds the heater control knob and progressively illuminates to indicate the actual surface temperature. This not only provides a bright, obvious indication that the unit is hot, which can be seen from across the room, but also clearly differentiates the heat and stir controls.

## Hot warning light



All hotplate models feature a "Hot" warning light, which will flash once the hotplate surface reaches 50°C. The "Hot" light will continue to flash even once the unit has been switched off and unplugged from the mains, until the surface temperature drops below 50°C.

## Safety in design

For safety all units have been designed to direct any spills away from the user controls. A mains switch is standard (excluding Stir only models) for greater convenience and power saving. All units incorporate the latest technology, microprocessor controlled, dual thermocouples to ensure accurate temperature control and over temperature protection.

## Power

Powerful magnets and motor give stirring speeds up to 2000rpm and are capable of mixing large volumes (up to 15 litres)



## Retort rod



The entire range of hotplate stirrers feature an integral fitting for a retort rod, but the units are also uniquely designed to allow a retort base to slide underneath, saving valuable time where numerous units need to be set up, for example in an educational environment.

## Design – storage



The Undergrad range has been designed with ease of use in mind, the case has been designed so the units can be easily stored on their side, minimising the required storage space. The units also have a compact footprint to take up less bench space.

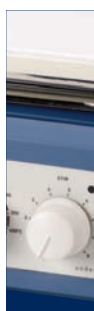


## Choice of surfaces

The hotplates and hotplate stirrers come with a choice of surfaces; available in a choice of ceramic or coated metal tops, all surfaces are square to allow more flexibility in vessel sizes and combinations.



### Glass Ceramic



Glass ceramic for excellent chemical resistance. The surface is easy to clean and the thermal properties allow very high plate temperatures, while ensuring the edges stay cooler, reducing the chance of accidental burns. The white surface ensures good visibility of colour changes, for example during titrations.

### Ceramic coated Aluminium



Ceramic coated Aluminium/silicon alloy for robustness. The top plate has a thin ceramic coating for added chemical resistance. A 700W element gives rapid heating and ensures even temperature distribution across the whole surface of the plate.

### Stainless Steel



Robust Stainless steel (US151 only), for accurate stirring. This surface won't produce eddy currents like aluminium and ensure a very powerful coupling and stirring action on our dedicated stirrers.



## Technical specification

### Hotplate Stirrers

Model	US152	UC152
Plate Material	Coated Aluminium/Silicon	Glass ceramic
Plate Dimensions, mm	150 x 150	150 x 150
Heated Area, mm	150 x 150	120 x 120
Heater Power, Watt	700	500
Max plate temp, °C	325	450
Stirrer Speed, rpm	100 - 2000	100 - 2000
Maximum Stirring Capacity, L *	15	15
Compatible with SCT1	Yes	Yes
Control accuracy with SCT1	±1°C	±1°C
Dimensions (w x d x h), mm	172 x 248 x 120	172 x 248 x 122
Net weight, kg	2.9	2.9
Electrical supply	230V, 50Hz, 750W	230V, 50Hz, 550W
IP Rating	32	32



### Hotplates

Model	US150	UC150
Plate Material	Coated Aluminium/Silicon	Glass ceramic
Plate Dimensions, mm	150 x 150	150 x 150
Heated Area, mm	150 x 150	120 x 120
Heater Power, Watt	700	500
Max plate temp, °C	325	450
Compatible with SCT1	Yes	Yes
Control accuracy with SCT1	±1°C	±1°C
Dimensions (w x d x h), mm	172 x 248 x 120	172 x 248 x 122
Net weight, kg	2.2	2.2
Electrical supply	230V, 50Hz, 700W	230V, 50Hz, 500W
IP Rating	32	32



### Stirrers

Model	US151	UC151
Plate Material	Stainless steel	Glass ceramic
Plate Dimensions, mm	150 x 150	150 x 150
Stirrer speed, rpm	100 - 2000	100 - 2000
Max. stirring capacity, L *	15	15
Compatible with SCT1	No	No
Dimensions (w x d x h), mm	172 x 248 x 109	172 x 248 x 107
Net weight, kg	2.0	2.0
Electrical supply	230V, 50Hz, 50W	230V, 50Hz, 50W
IP Rating	32	32



\* Based on water contained in a 20 litre glass bottom flask

## Temperature controller

All hotplate models are compatible with the Stuart® SCT1 temperature controller. In conjunction with your Undergrad hotplate the SCT1 ensures accurate temperature control of aqueous or oil based samples, up to a maximum of 200°C. The units automatically detect when the SCT1 temperature controller is plugged in.



## SCT1 Key features

- Accurate liquid temperature control
- Built in retort fitting and probe holder
- Detachable temperature probe
- Bright, easy to read LED display
- Compact and light weight
- Comprehensive range of accessories

## Temperature control

Providing reassurance that the temperature of the sample is precisely controlled at all times.

A range of accessories is also available to allow for a complete set up of controller, temperature probe and stirrer hotplate.

Accessory probe holder - clamps on to retort rod to allow secure positioning of the temperature probe in the sample.

Accessory retort rod - screws in to the rear of all models of hotplates and hotplate stirrers.

A PTFE probe is also available for those applications requiring a chemically resistant probe.

# SCT1 Temperature controller

## Technical Specification

Model	SCT1
Sensor type	PT100
Probe	Stainless steel
Temperature range	50° to 200°C
Accuracy	±0.5°C
Resolution	1°C
Dimensions (w x d x h)	90 x 75 x 123mm
Weight	0.3kg (inc. probe)





## Ordering information

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Product Code	Description
UC152	Stirrer/hotplate, ceramic plate
US152	Stirrer/hotplate, coated aluminium plate
UC150	Hotplate, ceramic plate
US150	Hotplate, coated aluminium plate
UC151	Stirrer, ceramic plate
US151	Stirrer, stainless steel plate
SCT1	Digital temperature controller
SCT1/1	Accessory probe holder
SCT1/2	PTFE temperature probe
SR1	Retort rod, 600mm x 12mm diameter



# WolfLabs

**Pricing on any accessories shown can be found by keying the part number into the search box on our website.**

The specifications listed in this brochure are subject to change by the manufacturer and therefore cannot be guaranteed to be correct. If there are aspects of the specification that must be guaranteed, please provide these to our sales team so that details can be confirmed.

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