

# Hotplates, Stirrers & Hotplate Stirrers

with BioCote<sup>®</sup> antimicrobial protection



# Undergrad Hotplates

The Cole-Parmer® Stuart™ range of Undergrad hotplates includes dedicated hotplates, stirrers, and combination hotplate stirrer models, which are available in a choice of coated metal or ceramic tops. The square design of the hotplate allows flexibility of vessel sizes and combinations; e.g. four 250 mL beakers can easily fit on the hotplate surface at the same time.

## Key features

**Save Space** → compact, stackable design for reduced benchtop and storage footprint

**Safe** → hot warning light remains on even when unplugged

**Protected** → glazed with BioCote® for antimicrobial protection

**Control** → Optional temperature controller accurately regulates sample temperature

**Robust** → built with a tough aluminium casing for longevity

**Convenient** → controller retort stand easily nests underneath the unit

**Customisable** → choice of glass-ceramic or ceramic-coated-metal surfaces



## Safety in Design

For safety, all units are designed to direct spills away from the user controls. For greater convenience and power saving, units are built with a standard mains switch (excluding stir-only models). All units are incorporated with the latest technology and microprocessor-controlled dual thermocouples to ensure accurate temperature control and protection from overheating.

## Power in Performance

Powerful magnets and motors allow remarkable stirring speeds (up to 2000 rpm) and mixing of large volumes of liquids (up to 15 L).

# Classic Build, Modern Features

## Hot Warning Light

The "Hot" warning light flashes when the hotplate surface reaches 50°C, and continues to flash until the surface temperature drops below 50°C, even when unplugged.

## Retort Rod

All units feature an integrated fitting for a retort rod and allows a retort base (optional) to slide underneath, saving valuable bench space.



## Digital Display

Keep a close eye on your parameters - the digital display clearly shows the hotplate temperature, while in use.

## LED Temperature Indicator

All non-digital heating models feature a true temperature indicator - the LED ring surrounding the control knob progressively illuminates, showing the plate temperature increasing in real time.



US152D hotplate



UC152D hotplate

# Choice of Surfaces

Hotplates and hotplate stirrers are available in glass-ceramic or coated metal tops; the square-shaped surfaces allow more flexibility of vessel sizes and combinations.



## Glass Ceramic

Glass ceramic surface provides excellent chemical resistance; easy-to-clean with thermal properties that allow very high plate temperatures, while ensuring the edges stay cooler, reducing the chance of accidental burns. The white surface ensures good visibility of any changes in sample colour, for example during titration reactions.

## Ceramic-Coated Aluminium

Ceramic-coated aluminium/silicon alloy offers robustness. The thin ceramic coating provides added chemical resistance, while the 700W element allows rapid heating to desired temperature.

## Stainless Steel

Strong stainless steel (US151 only) surface aids accurate stirring. Unlike aluminium, it does not produce eddy currents and ensures robust coupling and a powerful stirring action.

# Technical Specification

| Model | Plate Material | Plate Dimensions, mm | Heated Area, mm | Heater Power, Watt | Max Plate Temp, °C | Stirrer Speed, rpm | Max Stirring Capacity, L | Compatible with SCT2 | Control Accuracy w/ SCT2, °C | Dimensions (w x d x h), mm | Net weight, kg | Power, Watt | Electrical Supply | IP Rating | Digital Display Version |
|-------|----------------|----------------------|-----------------|--------------------|--------------------|--------------------|--------------------------|----------------------|------------------------------|----------------------------|----------------|-------------|-------------------|-----------|-------------------------|
|-------|----------------|----------------------|-----------------|--------------------|--------------------|--------------------|--------------------------|----------------------|------------------------------|----------------------------|----------------|-------------|-------------------|-----------|-------------------------|

## Hotplate Stirrers

|               |                          |           |           |     |     |            |    |     |      |                 |     |     |                           |    |   |
|---------------|--------------------------|-----------|-----------|-----|-----|------------|----|-----|------|-----------------|-----|-----|---------------------------|----|---|
| <b>US152</b>  | Coated Aluminium/Silicon | 150 x 150 | 150 x 150 | 700 | 325 | 100 - 2000 | 15 | Yes | ±0.5 | 180 x 255 x 122 | 3.1 | 750 | 120V, 60Hz or 230V, 50Hz, | 32 | N |
| <b>US152D</b> | Coated Aluminium/Silicon | 150 x 150 | 150 x 150 | 700 | 325 | 100 - 2000 | 15 | Yes | ±0.5 | 180 x 255 x 122 | 3.1 | 750 | 120V, 60Hz or 230V, 50Hz, | 32 | Y |
| <b>UC152</b>  | Glass Ceramic            | 150 x 150 | 120 x 120 | 500 | 450 | 100 - 2000 | 15 | Yes | ±0.5 | 180 x 255 x 122 | 3.1 | 550 | 120V, 60Hz or 230V, 50Hz, | 32 | N |
| <b>UC152D</b> | Glass Ceramic            | 150 x 150 | 120 x 120 | 500 | 450 | 100 - 2000 | 15 | Yes | ±0.5 | 180 x 255 x 122 | 3.1 | 550 | 120V, 60Hz or 230V, 50Hz, | 32 | Y |

## Hotplates

|              |                          |           |           |     |     |   |   |     |      |                 |     |     |                           |    |   |
|--------------|--------------------------|-----------|-----------|-----|-----|---|---|-----|------|-----------------|-----|-----|---------------------------|----|---|
| <b>US150</b> | Coated Aluminium/Silicon | 150 x 150 | 150 x 150 | 700 | 325 | - | - | Yes | ±1°C | 180 x 255 x 122 | 2.5 | 700 | 120V, 60Hz or 230V, 50Hz, | 32 | - |
| <b>UC150</b> | Glass Ceramic            | 150 x 150 | 120 x 120 | 500 | 450 | - | - | Yes | ±1°C | 180 x 255 x 122 | 2.5 | 500 | 120V, 60Hz or 230V, 50Hz, | 32 | - |

## Stirrers

|              |                 |           |   |   |   |            |    |    |   |                 |     |    |                           |    |   |
|--------------|-----------------|-----------|---|---|---|------------|----|----|---|-----------------|-----|----|---------------------------|----|---|
| <b>US151</b> | Stainless Steel | 150 x 150 | - | - | - | 100 - 2000 | 15 | No | - | 180 x 255 x 109 | 2.4 | 50 | 120V, 60Hz or 230V, 50Hz, | 32 | - |
| <b>UC151</b> | Glass Ceramic   | 150 x 150 | - | - | - | 100 - 2000 | 15 | No | - | 180 x 255 x 109 | 2.4 | 50 | 120V, 60Hz or 230V, 50Hz, | 32 | - |

**US150**



**US151**



**US152**



**US152D**



**UC150**



**UC151**



**UC152**



**UC152D**





# Temperature Controller

All hotplate models are compatible with the Stuart SCT2 temperature controller. Together with your Undergrad hotplate, the SCT2 ensures accurate temperature control of aqueous or oil based samples, up to a maximum of 200°C.

The SCT2 temperature controller is automatically detected when plugged in.

## Key features

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

## Temperature Control

Rest assured that the temperature of the sample is precisely controlled at all times. A range of accessories are also available for the complete set-up of controllers, temperature probes and stirrer hotplates.

### ACCESSORIES

**Probe Holder** – clamps on to the retort rod to allow secure positioning of the temperature probe in the sample.

**Retort Rod** – securely screws in to the rear of all models of hotplates and hotplate stirrers.

**PTFE Probe** – chemically-resistant probe for accurate monitoring of hazardous or corrosive samples.

## Technical Specification

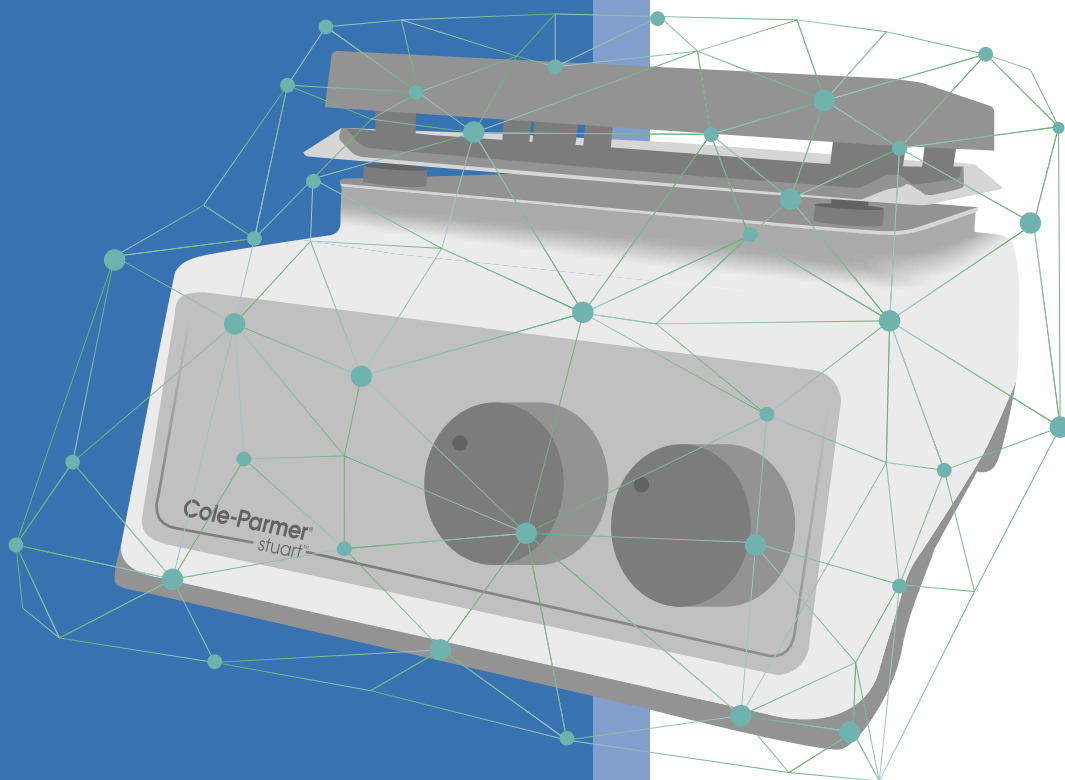
### SCT2 Temperature Controller

| Model                      | SCT2                |
|----------------------------|---------------------|
| Sensor Type                | PT100               |
| Probe                      | Stainless Steel     |
| Temperature Range, °C      | 20 to 200           |
| Accuracy, °C               | ±0.5                |
| Resolution, °C             | 1                   |
| Dimensions (w x d x h), mm | 90 x 75 x 123       |
| Weight, kg                 | 0.3 kg (inc. probe) |
| Ordering Number            | 04807-90            |

# Protected by BioCote®

BioCote® utilises silver ion, copper, zinc and organic additives to provide built-in antimicrobial protection; so the Cole-Parmer Stuart range can support a safer and more hygienic laboratory environment. By reducing levels of bacteria, mould and fungi, your BioCote protected piece of equipment can help reduce the risk of cross-contamination and consequently disease transmission within the lab.

To learn more about BioCote on our Cole-Parmer Stuart equipment, contact via [info@coleparmer.co.uk](mailto:info@coleparmer.co.uk)



## Ordering Information

| Ordering number | Model          | Description   |
|-----------------|----------------|---|
| 04807-58        | UC152          | Stirrer/hotplate, ceramic plate, 230V / 50Hz                  |
| 04807-59        | UC152/120V/60  | Stirrer/hotplate, ceramic plate, 120V / 60Hz                  |
| 04807-62        | UC152D         | Digital Stirrer/hotplate, ceramic plate, 230V / 50Hz          |
| 04807-63        | UC152D/120V/60 | Digital Stirrer/hotplate, ceramic plate, 120V / 60Hz          |
| 04807-60        | US152          | Stirrer/hotplate, coated aluminium plate, 230V / 50Hz         |
| 04807-61        | US152/120V/60  | Stirrer/hotplate, coated aluminium plate, 120V / 60Hz         |
| 04807-64        | US152D         | Digital Stirrer/hotplate, coated aluminium plate, 230V / 50Hz |
| 04807-65        | US152D/120V/60 | Digital Stirrer/hotplate, coated aluminium plate, 120V / 60Hz |
| 04807-50        | UC150          | Hotplate, ceramic plate, 230V / 50Hz                          |
| 04807-51        | UC150/120V/60  | Hotplate, ceramic plate, 120V / 60Hz                          |
| 04807-52        | US150          | Hotplate, coated aluminium plate, 230V / 50Hz                 |
| 04807-53        | US150/120V/60  | Hotplate, coated aluminium plate, 120V / 60Hz                 |
| 04807-54        | UC151          | Stirrer, ceramic plate, 230V / 50Hz                           |
| 04807-55        | UC151/120V/60  | Stirrer, ceramic plate, 120V / 60Hz                           |
| 04807-56        | US151          | Stirrer, stainless steel plate, 230V / 50Hz                   |
| 04807-57        | US151/120V/60  | Stirrer, stainless steel plate, 120V / 60Hz                   |
| 04807-90        | SCT2           | Temperature Controller  |
| 04805-91        | SR1            | Retort rod, 600 x 12 mm diameter                              |

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