



Mantles

CMU, EM Series, Digi-Mantles

We have an extensive range of heating mantles, including CMU Electromantles with metal cases and EM Electromantles with polypropylene cases, some models offering optional stirring functionality, catering for various round bottom flask capacities and being able to accommodate funnels. Digi-Mantles offer accurate electronic control of both heating and stirring and their modular inter-changeable design ensures that the same base controller can accept different-sized heating mantles. Our Multi (Extraction) Mantles can heat between 3 and 6 round bottom flasks simultaneously, providing stirring too if desired. Although mainly used for extraction, they can be used as a space-saving apparatus for heating multiple flasks in any laboratory.

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Electromantle Guide

The Electrothermal series of heating mantles has been specifically designed to provide a comprehensive answer to heating fluids in round bottom flasks in the modern laboratory.

Polypropylene Case

Electromantle Series	EM	EMA	EMV	EMX Spill-proof
Functions	Heating	Heating & Stirring	Heating: V-shaped for 60° funnels, round bottom & pear shaped flasks	
Flask Size (ml)				
10 - 50			•	
50	•	•		
100	•	•		
100 - 250			•	
250	•	•		
500	•	•		
500 - 1000			•	•
1000	•	•		
2000	•	•		
2000 - 5000			•	•
3000	•			
5000	•			
Temperature range	Ambient to 450°C for element			
Max. Stirring Rate	520rpm			
Certifications	CE approved			

Aluminium Case

Electromantle Series	CMU	CMUT Controlled or Uncontrolled	CMUA	CMUV Controlled or Uncontrolled	Digi-Mantles
Functions	Heating	Heating	Heating & Stirring	Heating (V-shaped for 60° funnels, round bottom & pear-shaped flasks)	Heating & Stirring
Flask Size (ml)					
50	•		•		
100	•		•		
250	•		•		•
250 - 1000		•			
500	•		•		•
1000	•		•		•
2000	•		•		
3000	•		•		
5000	•		•		
10000				•	
12000				•	
20000 - 22000				•	
Temperature range	Ambient to 450°C for element				Ambient to 450°C
Max. Stirring Rate	2000rpm				2000rpm
Certifications	CE and CSA approved; (for 115V only)				

Note: All units have 3 electrical choices, just add suffix X1 to the catalogue number for 115V, X6 for EU Plug 230V
 Controllers: For remote energy control use MC242, for remote temperature use MC810B



Metal Electromantles

CMU Series

The Electrothermal series of heating mantles has been specifically designed to provide a comprehensive answer to heating fluids in round bottom flasks in the modern laboratory.

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CMU

Uncontrolled Mantles

CMU Uncontrolled Electromantles are used in wet chemistry to heat liquids in round bottom flasks. The metal case is designed to remain "cool-to-the-touch" when in operation. Electrothermal heating mantles have a grounded stainless steel earth screen covering the element and are double fused for added safety. The CMU Electromantles are CE and CSA approved for 115V models.

Technical Specification

Material	Aluminum powder-coated case
Max Element Temperature	450°C

50ml - 250ml Ordering Information

Dimensions (d x w x h), mm	175 x 175 x 150
Shipping Weight, kg	0.75

Model	Capacity	Electrical Requirements
CMU0050/E	50ml	230V 50/60Hz, 75W
CMU0050/EX1	50ml	115V 50/60Hz, 75W
CMU0050/EX6*	50ml	230V 50/60Hz, 75W
CMU0100/E	100ml	230V 50/60Hz, 100W
CMU0100/EX1	100ml	115V 50/60Hz, 100W
CMU0100/EX6*	100ml	230V 50/60Hz, 100W
CMU0250/E	250ml	230V 50/60Hz, 200W
CMU0250/EX1	250ml	115V 50/60Hz, 200W
CMU0250/EX6*	250ml	230V 50/60Hz, 200W

500ml - 1000ml Ordering Information

Dimensions (d x w x h), mm	220 x 220 x 170
Shipping Weight, kg	1.5

Model	Capacity	Electrical Requirements
CMU0500/E	500ml	230V 50/60Hz, 280W
CMU0500/EX1	500ml	115V 50/60Hz, 280W
CMU0500/EX6*	500ml	230V 50/60Hz, 280W
CMU1000/E	1000ml	230V 50/60Hz, 380W
CMU1000/EX1	1000ml	115V 50/60Hz, 380W
CMU1000/EX6*	1000ml	230V 50/60Hz, 380W

*230V models with X6 suffix come with EU plug fitting

Key Features

- Valuable for fume hood or remote working
- Must be used with a controller; the MC5 & MC242 Controllers are our recommended ones
- Round bottom flask capacity of between 50ml - 5000ml
- "Cool-to-the-touch" design
- Element temperature up to 450°C
- Indicator lamps for power and heater operation
- Replaceable insulated heater cartridge
- An easy to clean, powder coated aluminium outer casing
- Non-skid feet and support rod clamps (not including support rod)
- Added safety features such as a grounded earth screen and double fuses
- CSA approved for 115V models



CMU
Uncontrolled Mantle

CMU

Uncontrolled Mantles

2000ml - 5000ml Ordering Information

Dimensions (d x w x h), mm	320 x 320 x 220
Shipping Weight, kg	2.75

Model	Capacity	Electrical Requirements
CMU2000/E	2000ml	230V 50/60Hz, 500W
CMU2000/EX1	2000ml	115V 50/60Hz, 500W
CMU2000/EX6*	2000ml	230V 50/60Hz, 500W
CMU3000/E	3000ml	230V 50/60Hz, 500W
CMU3000/EX1	3000ml	115V 50/60Hz, 500W
CMU3000/EX6*	3000ml	230V 50/60Hz, 500W
CMU5000/E	5000ml	230V 50/60Hz, 800W
CMU5000/EX1	5000ml	115V 50/60Hz, 800W
CMU5000/EX6*	5000ml	230V 50/60Hz, 800W

CMU

Uncontrolled Mantle



MC5

Controller

Uncontrolled CMU Electromantles are designed for use with the MC5 Controller. This may be valuable when remote working is preferred, for example when experiments are being conducted in fume hoods.

Ordering Information

Model	Electrical Requirement
MC5	230V, 50/60Hz, 800W
MC5X1	115V, 50/60Hz, 460W
MC5X6*	230V, 50/60Hz, 800W

*Comes with EU Plug fitting

MC5

Controller



CMU

Controlled Mantles

Electrothermal's metal-cased CMU Electromantles are the culmination of years of experience and continuous design improvement. These well-established products are used throughout many industries for a huge variety of applications. Today, we can confidently guarantee to give you quality products whose reliability and safety continue to make them market leaders.

50ml - 250ml Ordering Information

Dimensions (d x w x h), mm	175 x 175 x 150
Shipping Weight, kg	0.75

Model	Capacity	Electrical Requirements
CMU0050/CE	50ml	230V 50/60Hz, 75W
CMU0050/CEX1	50ml	115V 50/60Hz, 75W
CMU0050/CEX6	50ml	230V 50/60Hz, 75W, EU Plug
CMU0100/CE	100ml	230V 50/60Hz, 100W
CMU0100/CEX1	100ml	115V 50/60Hz, 100W
CMU0100/CEX6	100ml	230V 50/60Hz, 100W, EU Plug
CMU0250/CE	250ml	230V 50/60Hz, 200W
CMU0250/CEX1	250ml	115V 50/60Hz, 200W
CMU0250/CEX6	250ml	230V 50/60Hz, 200W, EU Plug

500ml - 1000ml Ordering Information

Dimensions (d x w x h), mm	220 x 220 x 170
Shipping Weight, kg	1.5

Model	Capacity	Electrical Requirements
CMU0500/CE	500ml	230V 50/60Hz, 280W
CMU0500/CEX1	500ml	115V 50/60Hz, 280W
CMU0500/CEX6	500ml	230V 50/60Hz, 280W, EU Plug
CMU1000/CE	1000ml	230V 50/60Hz 380W
CMU1000/CEX1	1000ml	115V 50/60Hz, 380W
CMU1000/CEX6	1000ml	230V 50/60Hz, 380W, EU Plug

2000ml - 5000ml Ordering Information

Dimensions (d x w x h), mm	320 x 320 x 220
Shipping Weight, kg	2.75

Model	Capacity	Electrical Requirements
CMU2000/CE	2000ml	230V 50/60Hz, 500W
CMU2000/CEX1	2000ml	115V 50/60Hz, 500W
CMU2000/CEX6	2000ml	230V 50/60Hz, 500W, EU Plug
CMU3000/CE	3000ml	230V 50/60Hz, 500W
CMU3000/CEX1	3000ml	115V 50/60Hz, 500W
CMU3000/CEX6	3000ml	230V 50/60Hz, 500W, EU Plug
CMU5000/CE	5000ml	230V 50/60Hz, 800W
CMU5000/CEX1	5000ml	115V 50/60Hz, 800W
CMU5000/CEX6	5000ml	230V 50/60Hz, 800W, EU Plug

Key Features

- Round bottom flask capacity of between 50ml - 5000ml
- "Cool-to-the-touch" design
- Element temperature up to 450°C
- Built-in energy regulator
- Indicator lamps for power and heater operation
- Replaceable insulated heater cartridge
- An easy to clean, powder coated aluminium outer casing
- Non-skid feet and support rod clamps (not including support rod)
- Added safety features such as a grounded earth screen and double fuses
- CSA approved for 115V models

CMU

Controlled Mantles



Key Features

- Multiple volume round bottom flask capacity of between 250ml - 1000ml
- "Cool-to-the-touch" design
- Element temperature up to 450°C
- Built-in energy regulator
- Indicator lamps for power and heater operation
- Replaceable insulated heater cartridge
- An easy to clean, powder coated aluminium outer casing
- Non-skid feet and support rod clamps (not including support rod)
- Added safety features such as a grounded earth screen and double fuses
- CSA approved for 115V models

CMUT

Multiple volume Electromantle



CMUT

Multiple volume Electromantle

The CMUT Electromantle is a multiple volume CMU Electromantle, able to accommodate round bottom flasks of between 250ml to 1000ml capacity. Its key features are otherwise the same as for the CMU Electromantle.

Robust and economical

You can rely on CMU Electromantles to be the heating workhorse within your laboratory: They are economical to run, robust and easy to use, and our wide range of products caters for most sizes, making them flexible enough to meet almost all of your laboratory's heating requirements. Larger capacity products have multiple heating elements to ensure a more even and accurate heat transfer and the CMUT Electromantle has 2 separate circuits for this.

Ordering Information

Dimensions (d x w x h), mm	220 x 220 x 170
Shipping Weight, kg	1.5

Model	Capacity	Electrical Requirements
CMUT1000/CE	250- 1000ml	230V 50/50Hz, 300W
CMUT1000/CEX1	250- 1000ml	115V 50/60Hz, 300W
CMUT1000/CEX6*	250- 1000ml	230V, 50/60Hz, 300W

**NOTE: Codes ending with the suffix CEX6 come with EU Plug fitting*

CMUA

Stirring Electromantles

The CMUA Stirring Electromantle shares all the excellent features of the CMU Electromantle but with the added functionality of magnetic stirring. For convenience and safety, the electric circuitry for stirring is built into the base of the heater, enabling powerful stirring over a wide range of solution volumes and viscosities using a magnetic stir bar.

Magnetic Stirring

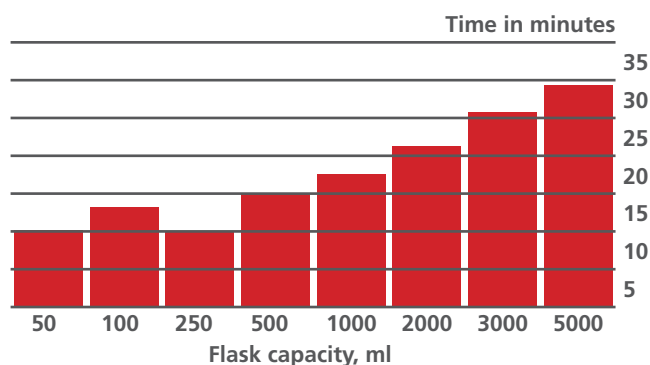
Stirring operation is simply achieved by placing the correct style and sized magnetic stir bar into the flask, selecting the minimum speed on the stirring dial control and then ramping up slowly to the required speed. The correct style and size of stir bar is determined according to the flask volume and the viscosity of its contents.

Stir speed is bi-directional and easily adjustable, and as an added feature, there is an auto-recapture switch fitted. Occasionally, the magnetic coupling to the stir bar may be interrupted and the stirring motion may be temporarily lost. Should there be a need to re-activate stirring, this can be quickly remedied by reducing the stir speed and then activating the auto-recapture switch; normal stirring can then be resumed at the desired speed.

Time required for boiling

The bar graph illustrates the time required for a half filled flask of water to reach boiling point in each of the flask capacities. For all the boiling tests the ambient temperature was 17°C.

Maximum element temp: 450°C
Voltage: 115V or 230V AC
Wattage: Nominal wattage of each flask capacity at rated voltage



Key Features

- Round bottom flask capacity of between 50ml- 5000ml
- Stirring speed up to 2000rpm
- Auto-recapture of magnetic stir bar; simple switch to re-activate stirring
- "Cool-to-the-touch" design
- Element temperature up to 450°C
- Built-in energy regulator
- Indicator lamps for power and heater operation
- Replaceable insulated heater & stirring cartridge
- An easy to clean, powder coated aluminium outer casing
- Non-skid feet and support rod clamps (not including support rod)
- Added safety features such as a grounded earth screen and double fuses
- CSA approved for 115V models

CMUA





CMUA

Stirring Electromantles

50ml - 250ml Ordering Information

Dimensions (d x w x h), mm	175 x 175 x 150
Shipping Weight, kg	0.75

Model	Capacity	Electrical Requirements
CMUA0050/CE	50ml	230V 50/60Hz, 60W
CMUA0050/CEX1	50ml	115V 50/60Hz, 60W
CMUA0050/CEX6*	50ml	230V 50/60Hz, 60W
CMUA0100/CE	100ml	230V 50/60Hz, 75W
CMUA0100/CEX1	100ml	115V 50/60Hz, 75W
CMUA0100/CEX6*	100ml	230V 50/60Hz, 75W
CMUA0250/CE	250ml	230V 50/60Hz, 200W
CMUA0250/CEX1	250ml	115V 50/60Hz, 200W
CMUA0250/CEX6*	250ml	230V 50/60Hz, 200W

500ml - 1000ml Ordering Information

Dimensions (d x w x h), mm	220 x 220 x 170
Shipping Weight, kg	1.5

Model	Capacity	Electrical Requirements
CMUA0500/CE	500ml	230V 50/60Hz, 280W
CMUA0500/CEX1	500ml	115V 50/60Hz, 280W
CMUA0500/CEX6*	500ml	230V 50/60Hz, 280W
CMUA1000/CE	1000ml	230V 50/60Hz, 380W
CMUA1000/CEX1	1000ml	115V 50/60Hz, 380W
CMUA1000/CEX6*	1000ml	230V 50/60Hz, 380W

2000ml - 5000ml Ordering Information

Dimensions (d x w x h), mm	320 x 320 x 220
Shipping Weight, kg	2.75

Model	Capacity	Electrical Requirements
CMUA2000/CE	2000ml	230V 50/60Hz, 500W
CMUA2000/CEX1	2000ml	115V 50/60Hz, 500W
CMUA2000/CEX6*	2000ml	230V 50/60Hz, 500W
CMUA3000/CE	3000ml	230V 50/60Hz, 500W
CMUA3000/CEX1	3000ml	115V 50/60Hz, 500W
CMUA3000/CEX6*	3000ml	230V 50/60Hz, 500W
CMUA5000/CE	5000ml	230V 50/60Hz, 800W
CMUA5000/CEX1	5000ml	115V 50/60Hz, 800W
CMUA5000/CEX6*	5000ml	230V 50/60Hz, 800W

*NOTE: Codes ending with the suffix CEX6 come with EU Plug fitting

CMUV

Stirring Electromantles

The CMUV Electromantles deliver the benefits of the CMU Electromantle, but do so for very large 60° funnels, as well as pear-shaped and round bottom flasks. This is achieved through a “V-shaped” design for the heating mantle, with funnels being accommodated through a bottom opening in the Electromantle base.

10-12 Litre Controlled CMUV Ordering Information

Dimensions (d x w x h), mm	485 x 485 x 300
Shipping Weight, kg	6

Model	Capacity	Electrical Requirements
CMUV10/CL	10L	230V 50/60Hz, 2000W
CMUV10/CLX1	10L	115V 50/60Hz, 2000W
CMUV10/CLX6*	10L	230V 50/60Hz, 2000W
CMUV12/CL	12L	230V 50/60Hz, 2000W
CMUV12/CLX1	12L	115V 50/60Hz, 2000W
CMUV12/CLX6*	12L	230V 50/60Hz, 2000W

20-22 Litre Controlled CMUV Ordering Information

Dimensions (d x w x h), mm	485 x 485 x 300
Shipping Weight, kg	8.5

Model	Capacity	Electrical Requirements
CMUV22/CL	20 to 22L	230V 50/60Hz, 3000W
CMUV22/CLX1	20 to 22L	115V 50/60Hz, 3000W
CMUV22/CLX6*	20 to 22L	230V 50/60Hz, 3000W

10-12 Litre Uncontrolled CMUV Ordering Information

Dimensions (d x w x h), mm	485 x 485 x 300
Shipping Weight, kg	6

Model	Capacity	Electrical Requirements
CMUV10/L	10L	230V 50/60Hz, 2000W
CMUV10/LX1	10L	115V 50/60Hz, 2000W
CMUV10/LX6*	10L	230V 50/60Hz, 2000W
CMUV12/L	12L	230V 50/60Hz, 2000W
CMUV12/LX1	12L	115V 50/60Hz, 2000W
CMUV12/LX6*	12L	230V 50/60Hz, 2000W

20-22 Litre Uncontrolled CMUV Ordering Information

Dimensions (d x w x h), mm	485 x 485 x 300
Shipping Weight, kg	8.5

Model	Capacity	Electrical Requirements
CMUV22/L	20 to 22L	230V 50/60Hz, 3000W
CMUV22/LX1	20 to 22L	115V 50/60Hz, 3000W
CMUV22/LX6*	20 to 22L	230V 50/60Hz, 3000W

*Add X6 suffix for 230V with EU plug

Key Features

- Accepts 60° funnels
- Accommodates pear-shaped and round bottom flasks
- Large flask/funnel capacities of between 10 to 22 litres
- Complete control of heating is provided by 3 separate electrical circuits that enable independent top, middle and bottom heating of flasks, each controlled with its own dial switch
- Spill-proof protection against electric shocks via a stainless steel screen between the flask and the heating element
- Available with and without controls
- Controller available for uncontrolled model
- “Cool-to-the-touch” design
- Element temperature up to 450°C
- Indicator lamps for power and heater operation
- Replaceable insulated heater cartridge
- An easy to clean, powder coated aluminium outer casing
- Non-skid feet and 3 support rod clamps (not including support rod)
- Added safety features such as a grounded earth screen and double fuses
- CSA approved for 115V models





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Use the above details to contact us if this literature doesn't answer all your questions.

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.

