



*Providing Excellence in Science Education*

# IPC Irwin Mains Heat Pad & Mat

Part Number IMHP230

## User Instructions



### INTRODUCTION.

Thank you for purchasing the IPC Irwin Mains Heat Pad and Mat or sometimes known as the Flameless Bunsen Burner. This versatile Heat Pad allows the user to heat up beakers, conical flasks etc. without the safety risks of fire or the use of gas. **However: this unit should never be left on or used without supervision.**

### DESCRIPTION.

The Heat Pad and Mat consist of a circular orange silicone electrical heating element attached to a two-layer heatproof mat, it can be placed directly on a bench or table while in use. Due to this flat design, there is much less danger of items such as beakers from toppling over.

The Heat Pad and Mat is particularly useful for heating water, boiling alcohol etc. and solves the problem where a classroom is without a gas supply. The design of the heating element allows an even temperature across the surface, the product is also splash-proof and so may be used where spillage is possible. It comes complete with a 1.5m silicon supply cable and UK mains plug.

### INSTRUCTIONS.

To power the Heat Pad and Mat simply plug it into the mains supply, the Heat Pad will heat up very quickly and will continue heating up while powered, this will therefore allow the required temperature to be reached over a set period of time depending on the item placed on the pad.

**IPC Irwin**

Holker School, Cark in Cartmel, Grange over Sands, Cumbria LA11 7PQ, United Kingdom

**Call:** 015395 58555 **Email:** sales@ipcirwin.com



*Providing Excellence in Science Education*

**However:** do not leave the Heat Pad powered once this temperature has been reached, as like a Bunsen Burner, the heat will continue to rise.

Once you are finished with the Heat Pad and Mat allow it to cool for at least 15 minutes before storing it away.

## **SPECIFICATIONS.**

|                   |                                 |
|-------------------|---------------------------------|
| Electrical Supply | = 220-240VAC, 50-60Hz           |
| Dimensions        | = 150mm x 150mm x 38mm overall. |
| Heat Pad dia.     | = 100mm                         |
| Mass              | = 0.3kg                         |
| Wattage           | = 60 Watts                      |
| Fuse Ratings      | = 3 Amps (UK Mains Plug).       |

**Please Note:** This Equipment is for Education, Training, or research Purposes Only.

### **Low Voltage Version.**

IPC Irwin also offer a Low Voltage Heat Pad and Mat (IHP12) should mains power not be desired or practical. This unit requires a supply voltage of 12VDC/AC at 5A for 60W operation and comes complete with 0.5m leads with 4mm connection plugs.

## **IMPORTANT - ELECTRICAL SAFETY NOTICE**

Only connect the product to single phase mains electrical supply (with neutral nominally at each potential), also check that the supply voltage and frequency are within the products stated range. Before connecting to the mains electrical supply, examine the information on the products rating label (the value of the fuse fitted to the product is also stated), ensure that the mains plug or outlet circuit is fitted with an appropriate fuse of higher value.

### **WARNING: THIS PRODUCT MUST BE EARTHED**

**This product is designed for Electrical Safety Class 2.**

If a mains plug is not fitted, connect the wires to a Standard UK, 3-pin plug as follows:-

|                                |                               |
|--------------------------------|-------------------------------|
| Brown wire to terminal marked: | L (Live) or coloured Brown.   |
| Blue wire to terminal marked:  | N (Neutral) or coloured Blue. |

**Note:** The Green/Yellow wire is not present on this product.

**LIVE PARTS SHOULD NEVER BE EXPOSED UNLESS THE PRODUCT HAS BEEN SWITCHED OFF AND ISOLATED FROM THE MAINS ELECTRICITY SUPPLY.**

**IPC Irwin**

Holker School, Cark in Cartmel, Grange over Sands, Cumbria LA11 7PQ, United Kingdom

**Call:** 015395 58555 **Email:** sales@ipcirwin.com



*Providing Excellence in Science Education*

Thank you for choosing this IPC Irwin product, which has specifically been designed for education, and we know it will bring you good service long into the future. This is just one product of a wide range of UK designed and manufactured products to enhance a STEM education. Please see [www.ipcirwin.com](http://www.ipcirwin.com) website for more details on the products and service we provide to support teaching and learning in science and technology.

IPC Irwin also provide Portable Appliance Testers and a Calibration service, for more details please go to [www.ipcirwin.com](http://www.ipcirwin.com) or call our sales and technical support line on 015395 58555.



**IPC Irwin**

Holker School, Cark in Cartmel, Grange over Sands, Cumbria LA11 7PQ, United Kingdom

**Call:** 015395 58555 **Email:** [sales@ipcirwin.com](mailto:sales@ipcirwin.com)



*Providing Excellence in Science Education*

**Declaration of Conformity** (In Accordance with EN ISO 17050-1:2010).

Manufacturer: **IPC Irwin, Holker School, Cark-in-Cartmel, Grange-over-Sands, Cumbria, LA11 7PQ, United Kingdom.**

Product/Part No: **Mains Heat Pad & Mat (230V AC, 50Hz main voltage)/IMHP230**

This conformity certificate approves the compliance of the product with the essential safety requirements of the following UK Standards and Regulations:

|                           |                                                                                                                                         |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| <b>SI 2005 No.1803</b>    | <b>General Product Safety Regulation (implements Directive 2001/95/EC).</b>                                                             |
| <b>SI 2016/1101</b>       | <b>Electrical Equipment (Safety) Regulation (implements Directive 2014 /35/EU.</b>                                                      |
| <b>EN 61010-1: 2010</b>   | <b>Electrical Requirements for Laboratory Test &amp; Measurement Equipment.</b>                                                         |
| <b>EN 61000-6-1: 2019</b> | <b>EMC, Generic Standards, Immunity for Residential, Commercial and Light Industrial Environments.</b>                                  |
| <b>EN 61000-6-3: 2019</b> | <b>EMC, Generic Standards, Emission for Residential, Commercial and Light Industrial Environments.</b>                                  |
| <b>SI 2012 No. 3032</b>   | <b>Restriction on Hazardous Substances (RoHS) in Electrical and Electronic Equipment Regulation, (implements Directive 2011/65/EU).</b> |



Mark can be used only in the case of conformity assessment according to all relevant UK Standards and Regulations.

**EU Declaration of Conformity** (In accordance with European Parliament and Council Decision No: 768/2008/EC Annex III).

This conformity certificate approves the compliance of the product with the essential safety requirements of the following EC/EU Directives (Manufacturer, Product/Part No: as above).

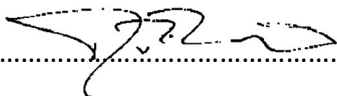
|                   |                                                              |
|-------------------|--------------------------------------------------------------|
| <b>2001/95/EU</b> | <b>General Product Safety Directive.</b>                     |
| <b>2014/35/EU</b> | <b>Low Voltage Directive (LVD).</b>                          |
| <b>2014/30/EU</b> | <b>Electromagnetic Compatibility (EMC) Directive.</b>        |
| <b>2011/65/EU</b> | <b>Restriction on Hazardous Substances Directive (RoHS).</b> |

European harmonised Standards used for conformity assessment and declaration:

**EN 61010-1: 2010**      **Electrical Requirements for Laboratory Test & Measurement Equipment.**



Mark can be used only in the case of conformity assessment according to all relevant EC/EU Directives.

**Dickon Knight** (Director): .....  ..... Date of Issue: 24<sup>th</sup> May 2023.

In the event of any correspondence concerning this product, please contact your supplying agent quoting the catalogue number and serial number shown on the apparatus rating label, together with the voltage and frequency of the mains electrical supply. This will help us to process your enquiry quickly. Any spare parts which may be required are supplied on the understanding that the replacement of those requiring the exposure of live electrical connections **will** be undertaken by an electrically qualified person.

**IPC Irwin**

Holker School, Cark in Cartmel, Grange over Sands, Cumbria LA11 7PQ, United Kingdom

**Call:** 015395 58555 **Email:** sales@ipcirwin.com