

ambion

Low Carbon Heat Panels



DATASHEET

## Ambion Low Carbon Heat Panel System

Ambion uses its unique energy pulsing technology combined with infrared panels to completely out-perform conventional systems on thermostats.

## Key elements of the Ambion system

### Ambion low carbon heat panels

Through constant dynamic pulsing of electricity, the low carbon heat panels can maintain a room's temperature within 0.1°C of its target, while dramatically reducing energy consumption when compared with other technologies.

Heat is generated with infrared technology and panels have fully integrated sensors and micro-processors.

### Ambion control panel

This is the 'brain' of the system and puts customers in complete control of their heating. The control panel captures, logs and displays the energy consumption of each individual panel in the system and transmits operating data to Ambion's server to facilitate on-line technical support and data reports.

With the system at its most efficient when running 24 hours a day, users benefit from around-the-clock heating as standard.



#### No space constraints

Ideally suited to smaller properties or multi-occupancy buildings



#### Low carbon emissions

Carbon emissions typically reduced by 60% when compared to conventional heating systems



#### Suitable for all property types

Whether a retrofit project, new build or modular construction



#### Low upfront costs

Lower capital cost than storage heaters, and 50% cheaper than heat pumps



#### Low running costs

Typically 60% cheaper than conventional heating systems, while using less energy than other heating solutions, reducing fuel poverty risks



#### No maintenance

Containing no moving parts, so there's no hidden maintenance costs



#### Unique control system

Dynamic pulsing dramatically reduces energy usage and maintains room temperatures within 0.1C of their target, 24 hours a day



#### Ideal for time-of-use tariffs

A low and flat electrical load makes heat panels ideal for time-of-use tariffs, saving 25% on the unit cost of electricity



#### Perfect partner for solar and battery

A low and flat electrical load makes them ideal for use with solar and battery



#### Stay in control

A unique control panel collects data every hour, so users can easily view energy usage and the associated costs, and the system is not reliant on the user switching it on and off, like traditional heating systems

## Technical data - heat panels

Model No.	GH-518R	GH-518P	GH-518B
Description	Large landscape	Large portrait	Small
Power rating	820W	820W	430W
Heating area	12M <sup>2</sup>	12M <sup>2</sup>	6M <sup>2</sup>
Max. effective range	8M	8M	8M
Performance Ratio (~COP)	2.6	2.6	2.6
Working Voltage	230V	230V	230V
Voltage type	AC	AC	AC
Frequency	50Hz	50Hz	50Hz
Weight	19kg	19kg	10kg
Dimensions H* x W x D (mm)	645 x 1105 x 60	1145 x 605 x 60	640 x 555 x 60
Construction	White glass with a white frame		

Note: \*plus 20mm wall brackets at top

### Materials

Surround: seamless steel in white  
 Base: white painted aluminium  
 Glass Panels: toughened safety glass

### Electric Supply

Located at the right end of heater base, connection via ~1.8m flexible lead and a standard AC moulded power plug. The socket outlet to be installed near the panel and be easily accessible.

### Technology

Sensors: electro cobalt  
 Heating Element: Carbon Element  
 820W or 430W enclosed within toughened Safety Glass  
 Heat Form: Infrared Radiant and Convection  
 Infrared Wavelength: 4~9um  
 Internal: Ambion proprietary computer-controlled pulsing software and algorithms.  
 Multiple worldwide patents held. Protected by multiple registered designs.

For bathrooms and similar locations the panels are ingress protected (IP). The IP rating is 53.

### Safety Standards

GB 1705471.9, Worldwide PCT/GB2014/050913 and Great Britain 1315141.0 Patents Pending; Conforms to UL Standard UL 499 & Certified to CAN/CSA E60335-2-30 & WO2019/025756CHS



## Technical data - control panel (model no. PSU1001)

The Ambion heating system requires a control panel to operate normally.

Power Rating	130mA
Working Voltage	GB, NZ, AU: 230V / US: 120V
Voltage Type	AC
Frequency	GB, NZ, AU: 50Hz / US: 60Hz
Width	204mm
Height	146mm
Depth	58mm
Weight	<1kg
Colour	White with chrome base
IP (Ingress Protection) Rating	40
Warranty period	5 years

### Materials

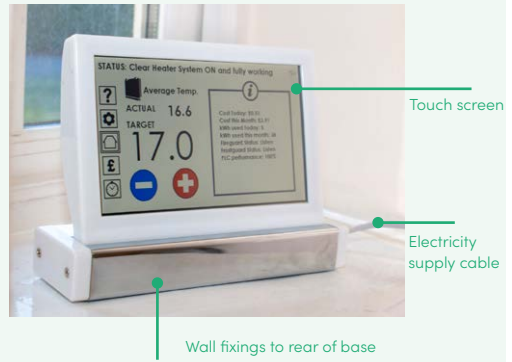
Body: White plastic casing  
Base: Chrome plated Aluminium  
Screen: Touchscreen Display

### Electric Supply

Located on the rear of the control panel, connection via CAT5 or CAT6 patch lead to an Ambion bespoke power supply unit (both supplied). The socket outlet to be installed near the equipment and to be easily accessible.

### Technology

Software: Each control panel runs on Ambion proprietary software which controls (amongst other things) the phasing of the heat panels in the system. This software is updated automatically using in built 4G connection or via a micro SD card.



The control panel is pre-programmed but customers can change the settings at any time with their own preferences. For example, customers can change the name and temperature of each heater unit, link heater units to work as one unit together, or assign heater units to work in named zones (e.g. all bedrooms).

The control panel can be configured with three home screen options: Simple, Normal and Technical, to suit all resident preferences and applications.

For the system to work to its optimum efficiency, the Ambion system requires a dedicated wiring installation. This should include a consumer unit (where possible) with dedicated ring mains or radial circuits, to be fitted as part of main wiring installation programme. This is because the system communicates via the fixed wiring and having a dedicated circuit excludes the possibility of interference from other electrical equipment attached to the existing installation.

Our experts are on hand to answer any questions you may have about our low-carbon heating system. Just get in touch.

Get a quote: [sales@ambionheating.com](mailto:sales@ambionheating.com)

Get support: [techsupport@ambionheating.com](mailto:techsupport@ambionheating.com)

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