

ambion

Low Carbon Heat Panels



DATASHEET

**The leading low carbon heating choice for flats  
and small homes**

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 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.

## The smart choice for social housing

Ambion's infrared heat panels offer a space-saving, affordable alternative to heat pumps – delivering leading levels of comfort and control, and smarter energy use for residents at low costs for housing providers.

### Practical

**Space-saving:** Slimline panels free up space with no need for a boiler or wet delivery system.

**Low upfront costs:** More affordable than the latest storage heaters, with easy installation by any qualified electrician.

**Minimal maintenance:** No moving parts mean fewer repairs, and our panels come with a 10-year warranty.

### Effective

**Affordable heating:** Typical running costs from £35–45/month, further reduced with solar and smart tariffs.

**Comfort and control:** Fast heat-up times, even temperatures and an easy-to-use control panel.

**Mould prevention:** Reduces damp and cold spots for a healthier home.

### Future-ready

**Solar & smart tariff-ready:** Can provide further savings of c. 60%.

**Energy insights:** Tracks usage, temperature and costs for landlords and residents.

**Supports EPC targets:** Works with solar PV and smart water heating for better ratings.



## 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
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		

### 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

#### Electrical Safety

EN 60335-2-30: 2009 + A11: 2012  
 EN 60335-1: 2012 + A11: 2014

#### Electromagnetic Compatibility

EN50065-1:2011  
 EN61000-4-3:2006



#### RoHS 2

EN50581: 2012

#### Directives

2006/95/EC (the Low Voltage Directive)  
 2004/108/EC (the EMC Directive)  
 2011/65/EU (the RoHS2 Directive)



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

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

Power Rating	130mA
Working Voltage	GB: 230V
Voltage Type	AC
Frequency	GB: 50Hz
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

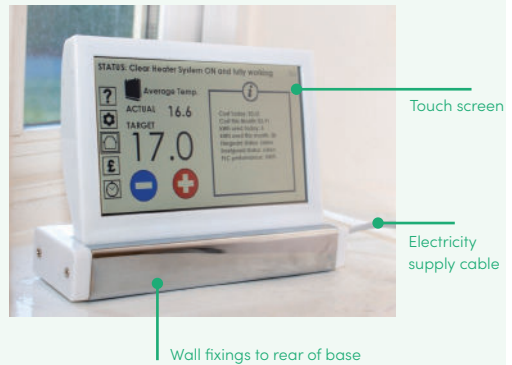
Screen: Touchscreen Display

### 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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