

# Residential & Commercial Infrared Heating Systems

SUNNYHEAT™ is a quickly installed, exceptionally effective glass heat panel and wireless controller combination for use in residential homes or commercial buildings. It is engineered and programmed to provide the highest levels of indoor heating efficiency, economy, and comfort. Ideal results are achieved when SUNNYHEAT™ panels are used as the sole heat source for structures.

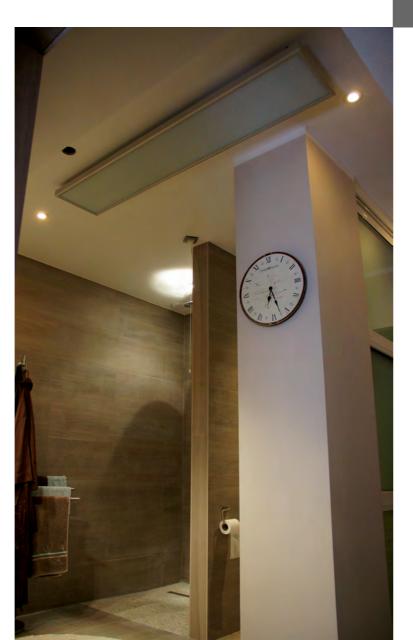
# Performance & Objectives

The primary goal of the system is to provide a comfortable indoor climate while minimising energy expenditure. When properly installed, SUNNYHEAT™ radiant panels deliver huge utility savings to owners in comparison with traditional heating systems. Annual heating equipment inspections, maintenance, and repair expenses are eliminated at the same time.

# Design & Engineering

We are the original-source manufacturer / supplier of this fully integrated heating system - 100% developed & produced under one roof.

SUNNYHEAT™ is manufactured in southern Germany to certified ISO9001 process standards. Our electronics engineering and manufacturing facility has decades of experience in the development of HVAC controls and systems with main clients being other producers of climate-control equipment and public / government entities.



## Features:

- Ceiling, wall, or angled placement by preference
- Programmable temperature settings specified by time and date
- User-defined output, consumption and surface temperature
- Record and analyse power consumption and temperature data
- Modifiable settings for the specific environment and heating task
- Add direct light fixtures or concealed LEDs to the panel • Various control devices, numerous system customisations
- IP65 versions for use in industrial properties or harsh conditions
- Choices in design to match any style of interior
- Firmware updates and hardware upgrades available
- Fire-safe



- The first heat panel system to use silicone rubber heat elements
- Fully customisable equipment temperatures, outputs, readings...
- First IR panel system to provide heating consumption statistics / reporting options for owners
- Standard and rapid heating modes
- Lighting control directly through the wireless thermostat
- Upgradeable system hardware and firmware versions

# Advantages:

- Dramatic reductions of heating costs
- Self-modulating power consumption
- Solid-state operation; runs silently and without maintenance
- Installs quickly in new builds or existing structures
- Durable internal heating element for stability & fast response
- Wireless temperature controller; unnecessary to cable in
- Clean heat source without combustion or air filtering requirements
- Preserves optimum humidity levels by reducing convection
- No transmission heat loss through pipes, chimneys, or ducts
- Diverse benefits to health from radiant heat
- Increases the availability of floor space for occupant use









# **SUNNYHEAT™** Infrared Heating Panels

SUNNYHEAT™ panels are assembled with tempered glass as the heat-radiating source and aluminum profile framing.

An integrated transmitter / receiver is located behind the heating panel for wireless communication with the ISTC (Intelligent Saving Temperature Controller).

SUNNYHEAT™ may be wired directly into the building's electrical system or simply plugged into a 230V outlet.

Numerous design options are also available depending upon the model / size of the heating panel.







30 x 120

RAL Glass, RAL Frames

Standard Glass, Mirrors, Premium Glass,





## Customisations:

Standard Glass (textured, off-white):





Choice of Standard Photo:



Premium Glass (Textured or "diamond" black, brown, or white):









Unique Photo:



**RAL Frames:** 



# **SUNMHEAT™** Technical Data - IR Panels

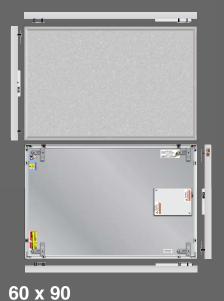
Model	Dimensions	Default Power	Max. Power	Heating Area (approx.)	Max. Current at 220V / 230V	Weight
30 x 30	295mm x 295mm x 53mm	125W	250W	3m <sup>2</sup>	1.2A / 1.1A	1.8 kg
30 x 60	295mm x 595mm x 53mm	250W	500W	6m <sup>2</sup>	2.3A / 2.2A	3.6 kg
30 x 90	295mm x 895mm x 53mm	375W	750W	9m <sup>2</sup>	3.4A / 3.3A	5.5 kg
30 x 120	295mm x 1195mm x 53mm	500W	1000W	12m <sup>2</sup>	4.5A / 4.3A	7.3 kg
60 x 60	595mm x 595mm x 53mm	500W	1000W	15m <sup>2</sup>	4.5A / 4.3A	6.8 kg
30 x 150	295mm x 1495mm x 53mm	625W	1250W	15m <sup>2</sup>	5.7A / 5.4A	9.2 kg
60 x 90	595mm x 895mm x 53mm	750W	1500W	20m <sup>2</sup>	6.8A / 6.5A	9.7 kg
60 x 120	595mm x 1195mm x 53mm	1000W	2000W	25m <sup>2</sup>	9.1A / 8.7A	11.6 kg

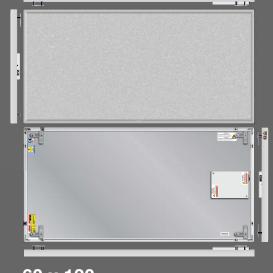
Common Characteristics of All Models			
Voltage	220V-230V AC / 50-60 Hz		
Electrical Connection	Grounding plug with 2m cable fixed to appliance		
Regulation Type	PI controller (proportional-integral) with modulating consumption		
Heating Surface	Tempered ESG safety glass, 4-6mm thickness		
Surface Temperature	Default max. 120°C, adjustable to 180°C / printed image panels adjustable to max. 120°C		
Radio Frequency	433.92 MHz communication between ISTC and heating panel		
Power Control	On/off switch on back of panel / power panel on/off with ISTC		
Safety Setting	Child-safe surface temperature feature		
IP Rating	IP 50 or IP65		
Installation	For placement on walls, ceilings, angled positions, or on floor stands		











30 x 150

Standard Glass, Mirrors, Premium Glass, RAL Glass, **RAL Frames** 

60 x 60 Standard Glass Standard Photos: Mirrors RAL Glass



60 x 120 Standard Glass Mirrors RAL Glass **Unique Photos** RAL Frames

Standard Photos:



Standard Photos Standard Photos **RAL Frames** Unique Photos

#### Intelligent Saving Temperature Controller

The wireless Intelligent Saving Temperature Controller is required to operate SUNNYHEAT<sup>TM</sup> IR panels.

One ISTC can control multiple heating panels of any size by assigning its unique identifier code to each unit.

The ISTC fine-tunes panel output and power consumption with proportional-integral (PI) regulation.

- Programmable heating schedules by hour/day
- Specify watt consumption per hour
- Set panel max. surface temperature
- Switch panel(s) on or off
- Lighting control (optional)
- Time display
- Away / holiday setting
- Child-safe surface temperature setting
- Celsius or Fahrenheit scales



#### **Open Window / Door Sensor**

This two-part device signals temperature drops to the heating system when exterior doors or windows are opened.

It activates when the smaller magnetic component shifts away from the control unit, signaling the ISTC to begin evaluating temperature changes for drafts.

The room temperature threshold for open windows or doors is user-specified in the ISTC service settings.





#### **Infrared Presence Detector**

This combined motion and infrared room occupant detector is an optional component that communicates directly with the heating panel to add further precision to the SUNNYHEAT<sup>TM</sup> system.

The sensor should be installed at a room location with a wide, open view of the heated space.

- Detects occupants at multiple points in the room
- Reduces power consumption to Unoccupied Status
- Wide angle of sensitivity



#### PC Control - total heating management

The SHCON program offers a separate method of wireless control for SUNNYHEAT<sup>TM</sup> systems while providing real-time temperature and power usage statistics.

Save reports for a chosen time period or entire heating season to log the performance and efficiency results of the SUNNYHEAT™ system in your home or business.

- Manage multiple ISTCs / rooms from one location
- Set and monitor room / panel temperatures
- Survey heating performance and consumption
- Supplied with USB module

#### Possibilites:

Hotels, offices, public buildings, schools and universities, healthcare centres, multi-unit properties...





#### **Direct Lighting**

SUNNYHEAT™ accommodates the connection of light fixtures directly to the heat panel.

This solution is for rooms where optimal placement of the heating unit may be at the same location where lights are already installed.

Power connection to the lamps is made through a second circuit and relayed through the panel electrical box to allow wireless control.

The light fixtures are secured to the panel with square fasteners embedded in the panel framing, or can be arranged per user preference (below).

Lighting may then be switched on or off with the wireless Intelligent Saving Temperature Controller (ISTC).



#### Floor Stands for Panels

Stainless steel floor stands bolt into the panel edges for convenient portability and placement of the heating panel where needed.

The upright stands are stainless steel and hold panels stable at either horizontal or vertical orientations.



### **LED Room Lighting**

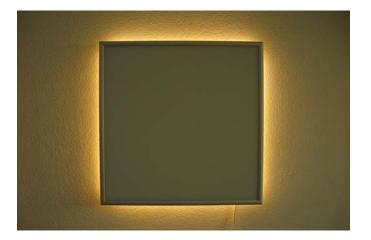
Low-power LED light strips plug into the connector at the back of the panel through an electrical relay.

The LED units may be fixed lengthwise, endwise or at all sides behind the panel casing to provide soft, ambient lighting to any interior.

Switching the lights on or off with the wireless ISTC permits control of both indoor illumination and heating in a single, unified appliance.

#### Possibilities:

- Residential or commercial bathrooms
- Restaurants / clubs
- Museums
- Mobile homes
- For either wall or ceiling installed panels



### 45° Angle Wall or Ceiling Supports

Aluminium support brackets allow SUNNYHEAT™ panels to be positioned at 45 degrees; horizontally on walls, or vertically in room corners.

Every panel has two sliding fasteners enclosed in each side of the framing to attach the brackets where needed for adjustable installation.

The angled installation brackets are supplied with a hex key and bolts.

