

connect  
Infrared

 **MADE IN  
BRITAIN**®

Connecting Technology for  
a Sustainable Future



## Welcome to Connect Infrared Heating.

At Connect Infrared Heating Solutions, we understand the unique challenges that come with providing comfortable and efficient heating in diverse environments. One of the most significant challenges facing churches today is offering sufficient comfort for various users—from worshippers to staff to visitors while cutting greenhouse gas emissions and preserving historic interiors. These demands create specific technical challenges for church buildings.

A church's heating system influences its fabric, contents, congregation, and mission. With heating comprising over 80% of a church's energy use and carbon footprint, it's essential to find a solution that minimises environmental impact and operating costs. Creating a warm and inviting space is crucial for encouraging further use of church facilities throughout the month, supporting community engagement and utilisation.

Our innovative infrared technology is designed to meet these needs, offering sustainable, efficient, and stylish heating solutions. By choosing Connect Infrared, you are not only investing in comfort heating but also committing to a greener, more sustainable future.

Join us in transforming the way we heat, light, and power our world, ensuring that every space from historic churches to modern homes benefits from our technology.

# Our Approach

With our 5-step approach, churches can enjoy a hassle-free experience from initial consultation to ongoing aftercare, knowing that their heating needs are in expert hands.



**Step 1: FREE Heating Audit** We begin with a complimentary heating audit, where our experienced technicians assess your church's current heating system. This audit helps us understand your existing setup, identify any inefficiencies or issues, and gather essential data to provide our recommendations.



**Step 2: Understanding Your Church's Needs** Next, we work closely with your church leadership to understand your specific heating requirements and preferences. Whether you're concerned about energy efficiency, comfort, or budget constraints, we take the time to listen and tailor our solutions to meet your unique needs.



**Step 3: Creating a Comprehensive Heating and Control Solution** Based on the findings from the heating audit and our discussions with your team, we design a comprehensive heating and control solution specifically tailored for your church. This solution may include a combination of high-efficiency heaters, smart thermostat systems, and zoning controls to optimise comfort and minimise energy usage.



**Step 4: Full Installation and Commissioning Service** Once the heating solution is approved, our expert team handles the full installation and commissioning process from start to finish. We ensure that every component is installed correctly and calibrated for optimal performance. Our goal is to minimise disruption to your church activities and provide a seamless transition to your new heating system.



**Step 5: Aftercare Service and Monitoring** Our commitment to customer satisfaction doesn't end with installation. We offer aftercare services to help you monitor and maintain your heating system effectively. This includes providing access to heating data analytics and offering proactive maintenance to address any issues before they escalate. Our goal is to ensure that your church remains warm and comfortable year-round, with minimal hassle for your team.



# Why Choose Our Heating Solution?



## **Net Zero Approach:**

Our system is engineered to align with the Net Zero Roadmap, enabling churches to minimise greenhouse gas emissions and contribute to a healthier environment.



## **Efficiency Redefined:**

Utilising the latest infrared technology, our heaters maximise energy efficiency, ensuring optimal performance while minimising operational costs.



## **Customised Solutions:**

We understand that every church is unique. Our team works closely with you to design a heating solution tailored to your specific space, ensuring maximum effectiveness and comfort.



## **Reliability and Durability:**

Built to last, our heating system is designed for long-term reliability, providing consistent warmth for years to come.





# Heating makes up **over 80%** of the energy needed to run a typical church

One of the most important challenges facing churches today is providing sufficient comfort for the many different users of the building, from worshippers to staff to visitors. Achieving this whilst cutting our greenhouse gas emissions and conserving historic interiors creates specific technical challenges for church buildings.

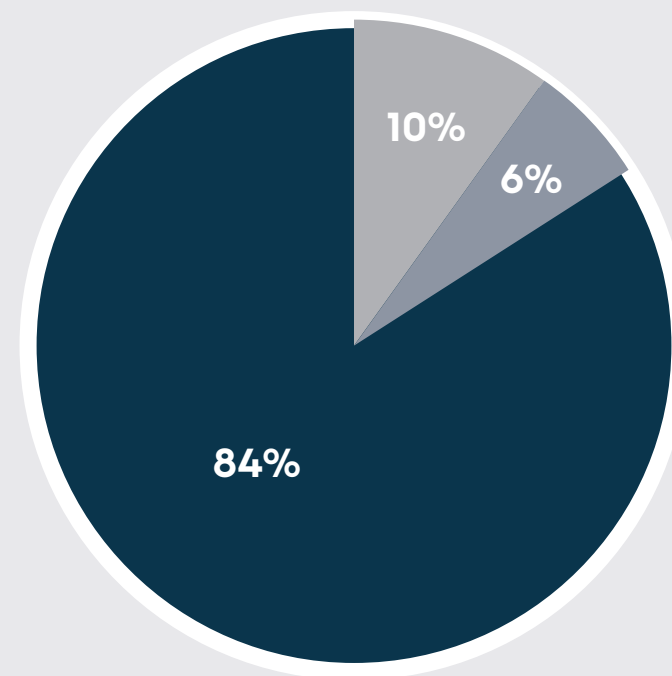
## How Connect Infrared can reduce your Energy usage

Infrared heating helps churches reduce energy consumption through several innovative features:

**Zonal Heating:** Target specific areas that need heating, avoiding wasteful heating of unused spaces.

**Smart Controls:** Optimise energy use with programmable thermostats and remote management, ensuring efficient operation.

**Green Energy Tariff:** Combine infrared heating with green energy tariffs to further reduce your carbon footprint and promote sustainability.



■ Heating ■ Other ■ Lighting

Percentage of total church energy use  
(sample = 126 churches and halls)

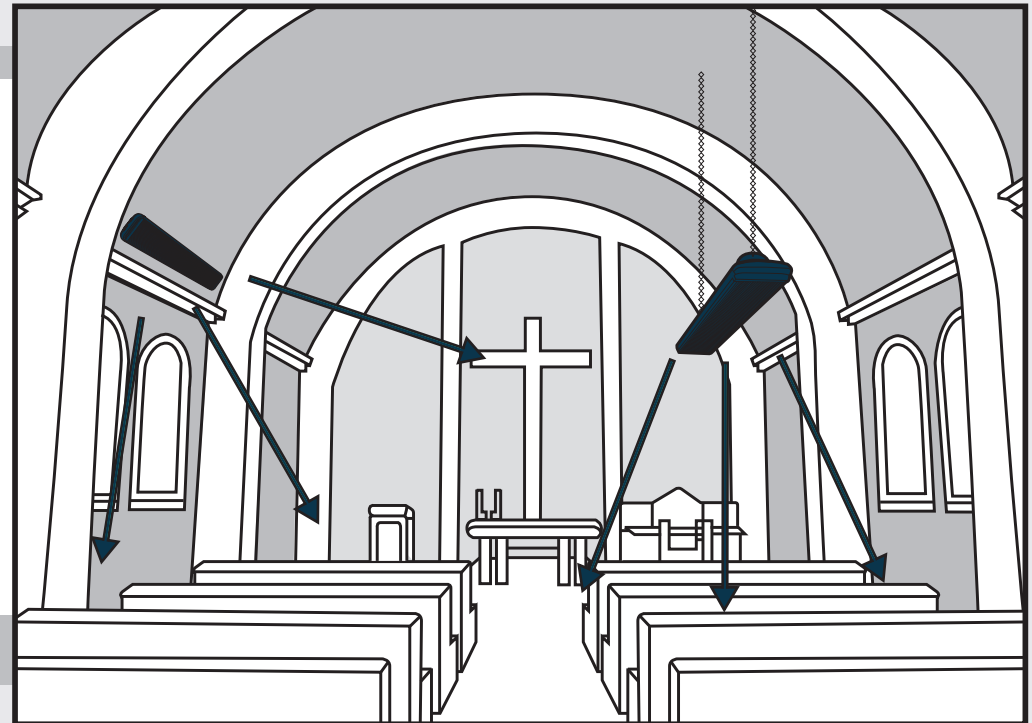
# Aesthetic with function

## Heat the Congregation and not the air in-between

At Connect Infrared, we prioritise functionality above all else, recognising that effective heating is the primary concern for churches. Our systems are engineered with this principle in mind, delivering instant effective/directional heat performance that is essential for reducing energy consumption and ensuring the comfort of congregations.

Infrared heating systems excel in efficiency, offering 30% greater effectiveness than standard plumbing-based systems and up to 50% more than storage heaters. By emitting electromagnetic waves directly to objects and surfaces, they minimise energy loss, ensuring quicker heat-up times, reduced maintenance, and quieter operation.

Convection heaters, such as radiators, primarily heat the air, a process known for its inefficiency and tendency to create pockets of cold air and drafts. Consequently, significant heat loss occurs as warm air disperses, diminishing overall heating effectiveness.





# The Connect Solution

Connect Infrared delivers sustainable heating solutions that integrate battery technology, hot water, solar power, and incorporate smart lighting and occupancy data systems. These innovations enhance energy efficiency, ensure reliability, and significantly reduce environmental impact, offering a comprehensive, sustainable solution to the church.



## **SMART Controls:**

While only heating the rooms you need; you will stay informed and in control of your infrared heating patterns and temperatures throughout your church.



## **Hot Water:**

Save up to 20% on your hot water bills by only heating what you need with optimised scheduling to fit your lifestyle that will ensure your hot water is ready when you are.



## **Solar PV:**

Make money by selling surplus energy you create back to the grid by pairing solar panels with our battery storage system.



## **EV Charging:**

Significant savings per year when you minimise the cost of charging your car by using PV Solar



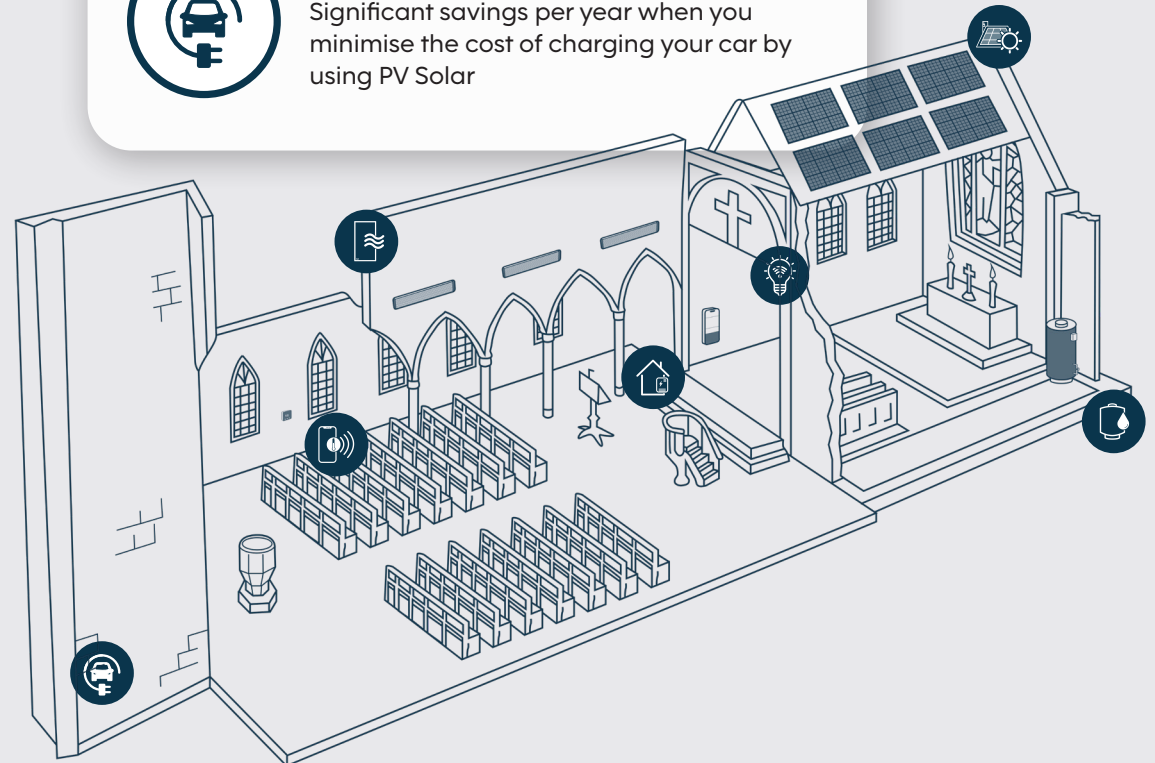
## **Battery Storage:**

We specialise in sourcing and installing the best batteries for solar power storage. We offer a wide range of different battery storage systems, meaning the right match for your specific requirements.



## **Lighting:**

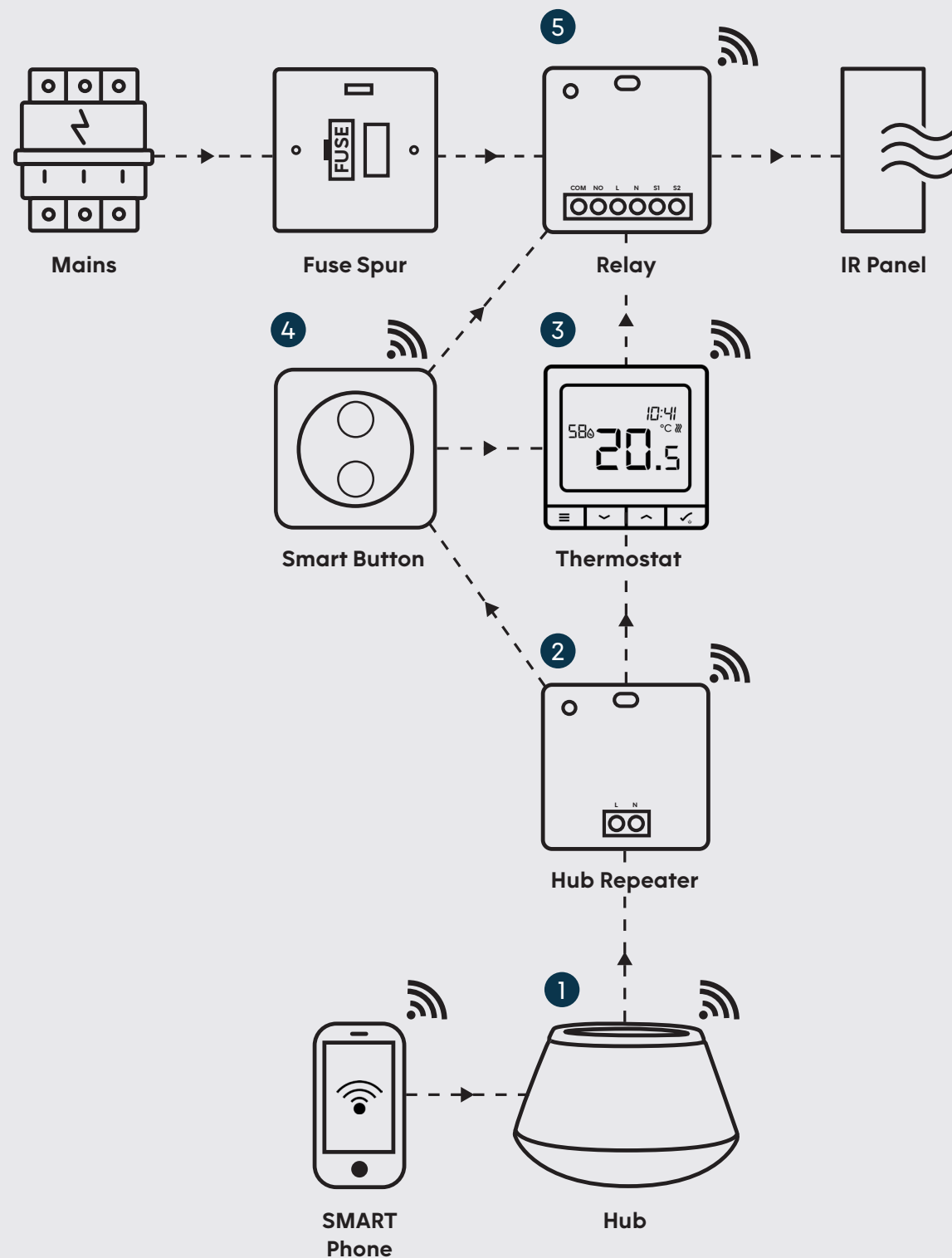
Specialise in LED technology designed to optimise energy efficiency (UK Manufactured)



# How our **SMART** System Works\*

- 1 HUB** - Internet connection required for pairing.  
While an internet connection is necessary for pairing, controlling IR Panel(s) does not depend on it. In the event of internet access issues, the app will be non-functional, and control will revert to the thermostats.
- 2 Hub Repeater** - Essential for extending the reach of wireless controls, ensuring seamless communication via the hub even in distant or obstructed areas. Ideal for maximizing coverage and maintaining connectivity throughout your space.
- 3 Thermostat** - Gain control over your IR Panel(s), conveniently accessible through the SMART App.  
Set schedules effortlessly using either the thermostat or the App interface.
- 4 Smart Button** - Manage your infrared panels effortlessly with the Smart Button. Customise One Touch controls to precisely tailor zoning for your spaces.
- 5 Relay** - Enables seamless switching on or off of your IR Panel(s) for optimal control.  
Utilize the relay system to monitor energy consumption, providing valuable insights into cost savings and efficiency.

\*This specification refers to the advanced control package.





# Take **Control** of your Energy Usage

Experience real-time data retrieval for your panels and zones with our SMART APP, powered by SMART Relays. Monitor your energy consumption per room, gaining invaluable insights to optimise energy usage and reduce waste.

## Zonal heating will reduce energy consumption further

For instance, let's look at a scenario where a 400W panel utilised 522.56W throughout the day. By converting this usage to 33p per Kw, we can calculate the operational cost of the panel as follows:

### Example of Conversion

Your electricity bill measures energy consumption in kilowatt-hours (kWh). Since 1 kilowatt (kW) equals 1,000 watts, determining how many kWh a specific device uses is as simple as dividing by 1,000.

$$522.56 \text{ Wh} \div 1000 = 0.523$$

To determine the daily cost of operating your zones or Panel(s), multiply your electricity rate by the kWh per day calculated before.

$$0.523\text{kWh} \times \text{£}0.33 = \text{£}0.17 \text{ per day}$$

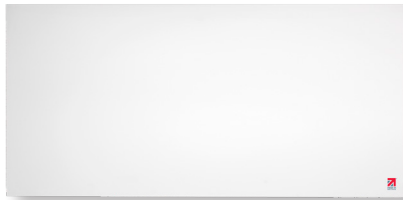
The screenshot shows the 'History' screen of the SMART APP. At the top, there's a status bar with the time 09:26, 4G signal, and 100% battery. Below the status bar is a navigation bar with a 'Back' button, a refresh icon, a red alert icon, and a menu icon. The main content area has a 'History' header with a calendar icon and an upward arrow. Below the header are 'Start' and 'End' date pickers, both set to 2024-05-08. There's a 'Search' button and icons for a bar chart, a list, and a save icon. A section titled 'Power of device' has a checkbox for 'S1-S2' and a text input field with '400' and a 'W' unit. Below this is a table with three columns: 'On', 'Off', and 'Consumption'. The table contains seven rows of data, each with an 'On' time, an 'Off' time, and a 'Consumption' value in Wh. The last row shows a total consumption of 522.56 Wh.

On	Off	Consumption
05-08 04:07:09 PM	05-08 04:16:24 PM	61.67 Wh
05-08 02:02:14 PM	05-08 02:11:58 PM	64.89 Wh
05-08 12:29:12 PM	05-08 12:40:13 PM	73.44 Wh
05-08 10:07:21 AM	05-08 10:13:00 AM	37.67 Wh
05-08 09:06:31 AM	05-08 09:34:29 AM	186.44 Wh
05-08 08:45:21 AM	05-08 09:00:07 AM	98.44 Wh
	05-08 05:00:20 AM	
Total use		522.56 Wh

# Versatile Infrared Technology Options

We understand that every church has unique heating requirements. That's why we offer a range of infrared wavelength options to accommodate various installation settings and preferences.

## Far Infrared Heating: Bringing Gentle Warmth



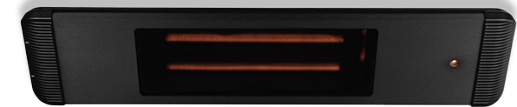
- Far Infrared, often referred to as 'thermal' infrared, produces gentle, comforting warmth.
- Ideal for creating a cosy and relaxing environment, far infrared heating is the epitome of comfort.
- Any RAL or printed images to further enhance to compliment existing decor of the church.

## Medium Infrared Heating: Balancing Efficiency and Comfort



- The medium infrared range strikes a harmonious balance between efficiency and comfort.
- This wavelength efficiently warms objects and surfaces, ensuring a swift and effective response to heating needs.
- Offering a versatile solution, medium infrared technology is perfect for spaces demanding both efficiency and warmth.

## Shortwave Infrared Heating: Precision Warmth (Heat by Light)



- Shortwave Infrared delivers precise, targeted heating with rapid response times. Not the preferred heating system for places of worship due to the light emission characteristics of this infrared option.
- Offering instant warmth upon activation, it caters to situations where immediate and intense heat is crucial.



# Here are some key **questions and answers** about infrared heating

## **Does infrared heating affect the organ?**

No, infrared heating does not affect the organ. Infrared heaters provide gentle and direct heat that warms objects and people without altering the ambient temperature drastically. This ensures that delicate instruments like the organ are not subjected to temperature fluctuations that could cause damage.

## **Does infrared heating affect the stonework?**

No, infrared heating does not affect the stonework. Infrared heating systems do not require invasive installations and do not produce moisture or condensation. This helps in maintaining the integrity of the stonework, preventing potential damage that could arise from traditional heating methods.

## **Does infrared heating affect wooden fixtures and furnishings?**

No, infrared heating does not affect wooden fixtures and furnishings. Since infrared heaters warm objects and people directly without excessively heating the air, there is no risk of drying out or damaging wooden structures and furnishings within the church.

## **Does infrared heating cause any noise?**

No, infrared heating operates silently. This is particularly important in maintaining the quiet and reverent atmosphere of the church, ensuring that services and events proceed without any disruptive background noise.

## **Does infrared heating require significant alterations to the church's interior?**

No, infrared heating does not require significant alterations. The installation of infrared heaters is minimally invasive, preserving the historical and architectural features of the church without the need for extensive ductwork or structural changes.

## **Does infrared heating produce obtrusive light emissions?**

No, infrared heating does not produce obtrusive light emissions. We offer zero-light heating, ensuring that the aesthetic and ambience of the church are maintained while providing effective and discreet heating.

# The CROWN our **Bespoke** Range

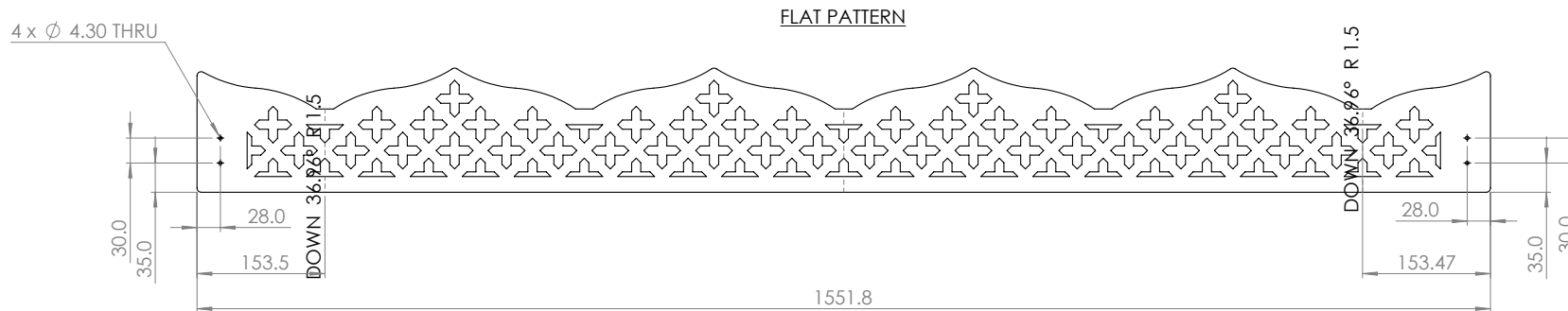
The Crown Range is a highly effective, zero-light discreet heater designed to provide churches and heritage buildings with a net-zero heating solution. Engineered with a focus on functionality, it has the capability to heat large congregation areas efficiently. The Crown Range combines superior performance with aesthetic design, ensuring that historic interiors and artefacts are preserved and protected while maintaining a comfortable environment.





The Crown Range is a bespoke heating solution that can be tailored to individual environments. Churches can be actively involved in the design process, allowing them to include their preferred symbol design on the fascia of the unit. This customisation ensures that the Crown Range not only meets specific heating needs but also aligns with the aesthetic and symbolic elements important to each unique space.

The Crown fascia is available in a range of heritage colours and can be equipped with or without smart lighting, while the unit's smart controls further enhance energy efficiency.



## Create your own design

We offer a bespoke design service tailored for church environments, allowing you to personalise your heating solution to reflect the unique character of your sacred space. Simply provide us with your church emblem or any significant iconography, and we will seamlessly integrate it into the fascia of the heater.

## The Classic Colour Range

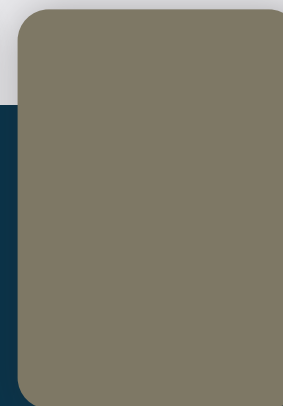
We have selected the Heritage Colour Range to ensure our heating systems blend aesthetically with traditional and historical interiors, maintaining the integrity of your space. These carefully chosen colours complement a wide range of architectural styles, providing a timeless and elegant appearance.



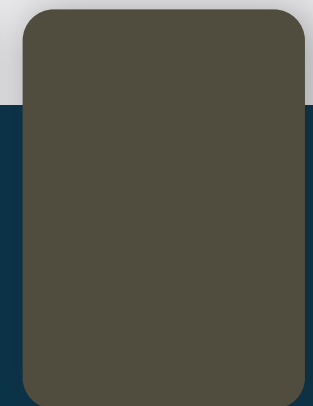
**Classic  
Champagne**



**Classic  
Gold**



**Classic  
Bronze**



**Classic  
Brown**





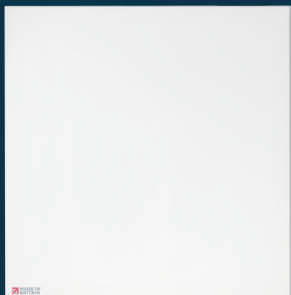


## Optional Extras

The Crown Heater is also available with integrated lighting, offering a unique design that has been carefully crafted to provide the perfect ambient effect and illumination. This thoughtful addition not only enhances the aesthetic appeal of your space but also ensures optimal lighting conditions.



## Premium Panels



<b>Surface:</b>	Aluminium
<b>Heating element:</b>	Infrared Sheet
<b>Voltage:</b>	230 Volt, 50 Hz
<b>Wattage:</b>	400W - 1100W
<b>Amps:</b>	1.7 - 5.2
<b>Protection:</b>	IP 44
<b>Installation:</b>	Ceiling or wall mounting Supplied bracket(s)
<b>Connection:</b>	1.8m of 3 core flex

**This appliance complies with European Directives:**

EN 60335-1:2012 / EN60335-2-30 (Safety of Electrical Appliances)

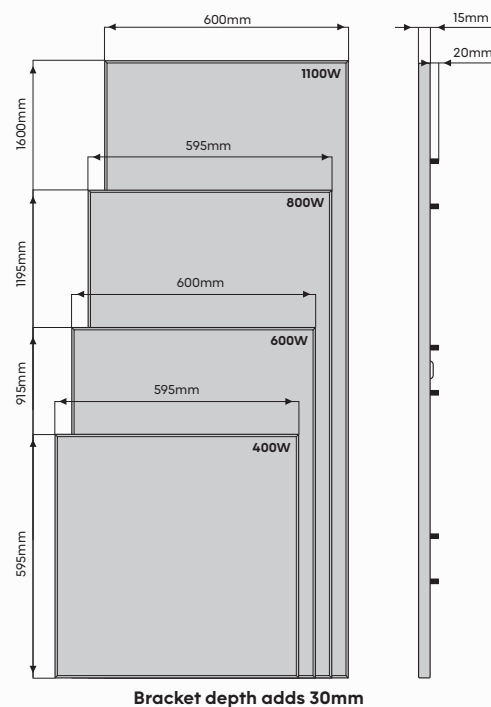
EN55014 1 + 2 / EN61003-2 / EN61003-3 (EMC)

EN62233-2008 (EMF)

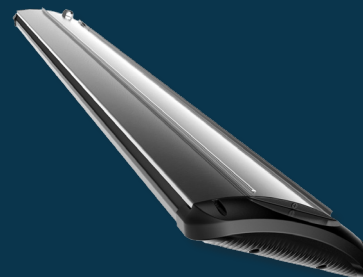
EN60529-1992 + A2 (IP44 rating)

2011/66/EU RoHS

UKCA Certified



## ONYX Range

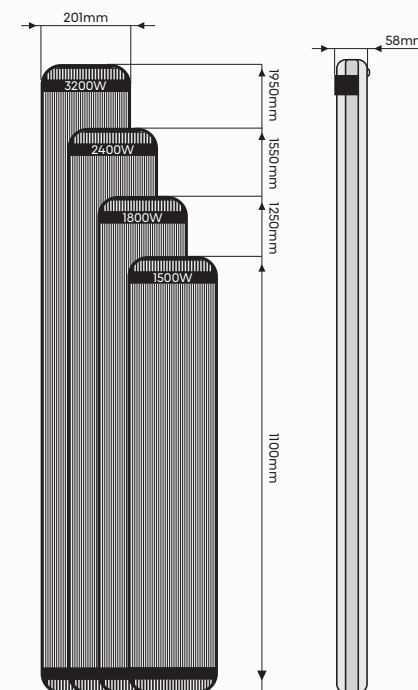


<b>Surface:</b>	Anodized Aluminium
<b>Heating element:</b>	IR-C
<b>Voltage:</b>	220-240 Volt, 50-60 Hz
<b>Wattage:</b>	1500W - 3200W
<b>Amps:</b>	6.52 - 13.91
<b>Protection:</b>	IP 55
<b>Installation:</b>	Wall mounting or Suspended
<b>Connection:</b>	3m of 3 core flex

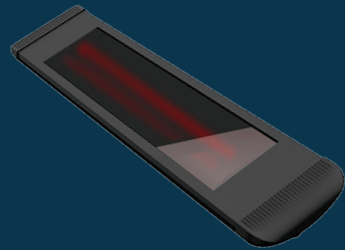
**This appliance complies with European Directives:**

CE 0051 certification

NB 0426



## Harmoni Range

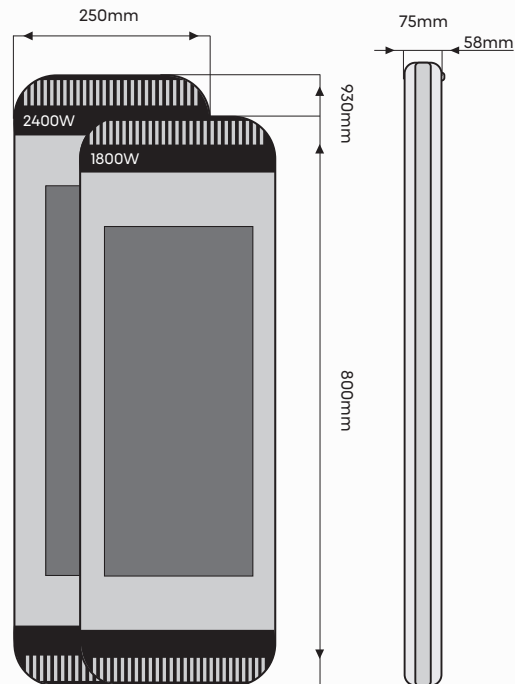


<b>Surface:</b>	Anodized Aluminium
<b>Heating element:</b>	Carbon Fibre IR-B
<b>Voltage:</b>	220-240 Volt, 50-60 Hz
<b>Wattage:</b>	1800W - 2400W
<b>Amps:</b>	7.83 - 10.43
<b>Protection:</b>	IP 55
<b>Installation:</b>	Wall mounting or Suspended
<b>Connection:</b>	3m of 3 core flex

This appliance complies with European Directives:

CE 0051 certification

NB 0426



## Crown Range

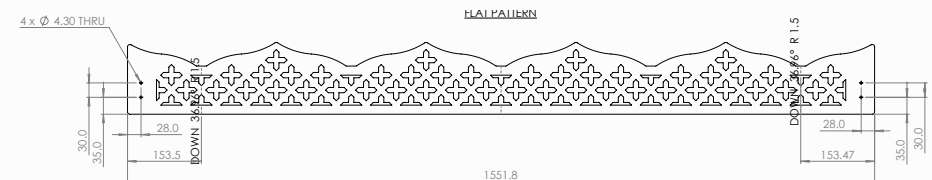
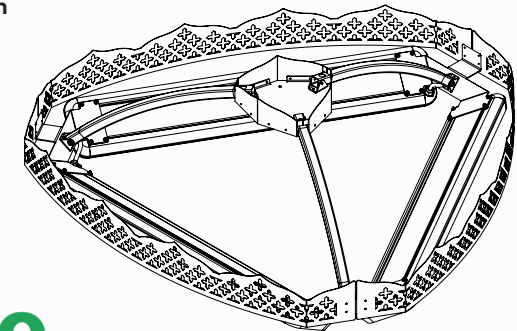


<b>Surface:</b>	Anodized Aluminium
<b>Heating element:</b>	IR-C
<b>Voltage:</b>	220-240 Volt, 50-60 Hz
<b>Wattage:</b>	1500W - 3200W
<b>Amps:</b>	6.52 - 13.91
<b>Protection:</b>	IP 55
<b>Installation:</b>	Suspended
<b>Connection:</b>	3m of 3 core flex

This appliance complies with European Directives:

CE 0051 certification

NB 0426





## Faithful Partnership Program

On a Path to the Net Zero Carbon Road Map at Connect, we believe in the power of strong communities, and we are thrilled to introduce a special initiative tailored just for places of worship: The Connect Faithful Partnership Program.

### Our Offer to You:

As the manufacturers of high-quality infrared products designed to enhance community spaces, we are inviting you to join our Faithful Partnership Program, an opportunity for your place of worship to not only benefit from our exceptional products but also to receive special privileges.



### Exclusive Partnership

When your place of worship becomes a part of our Faithful Partnership Program, you gain access to exclusive benefits and a unique opportunity to directly work with Connect Infrared, the UK manufacturer.



### Share the Joy

Spread the word about Jigsaw's products to other churches and their congregations within your network. Encourage them to explore the quality and reliability that define Jigsaw Infrared.



### Earn Financial Support

For every referred church that makes a purchase from Connect, your place of worship will receive a generous 5-10% of the order value as a token of our gratitude. Terms and conditions do apply.



### Join Us in the Movement Towards Sustainability

By partnering with Connect and embracing our innovative infrared heating solutions, your place of worship can play a pivotal role in advancing towards a sustainable future.

Together, let's pave the way to a greener tomorrow, where comfort and environmental responsibility go hand in hand.



# Smart Building Managed Service

Create a more sustainable future while reaping the rewards of energy savings and profitability.

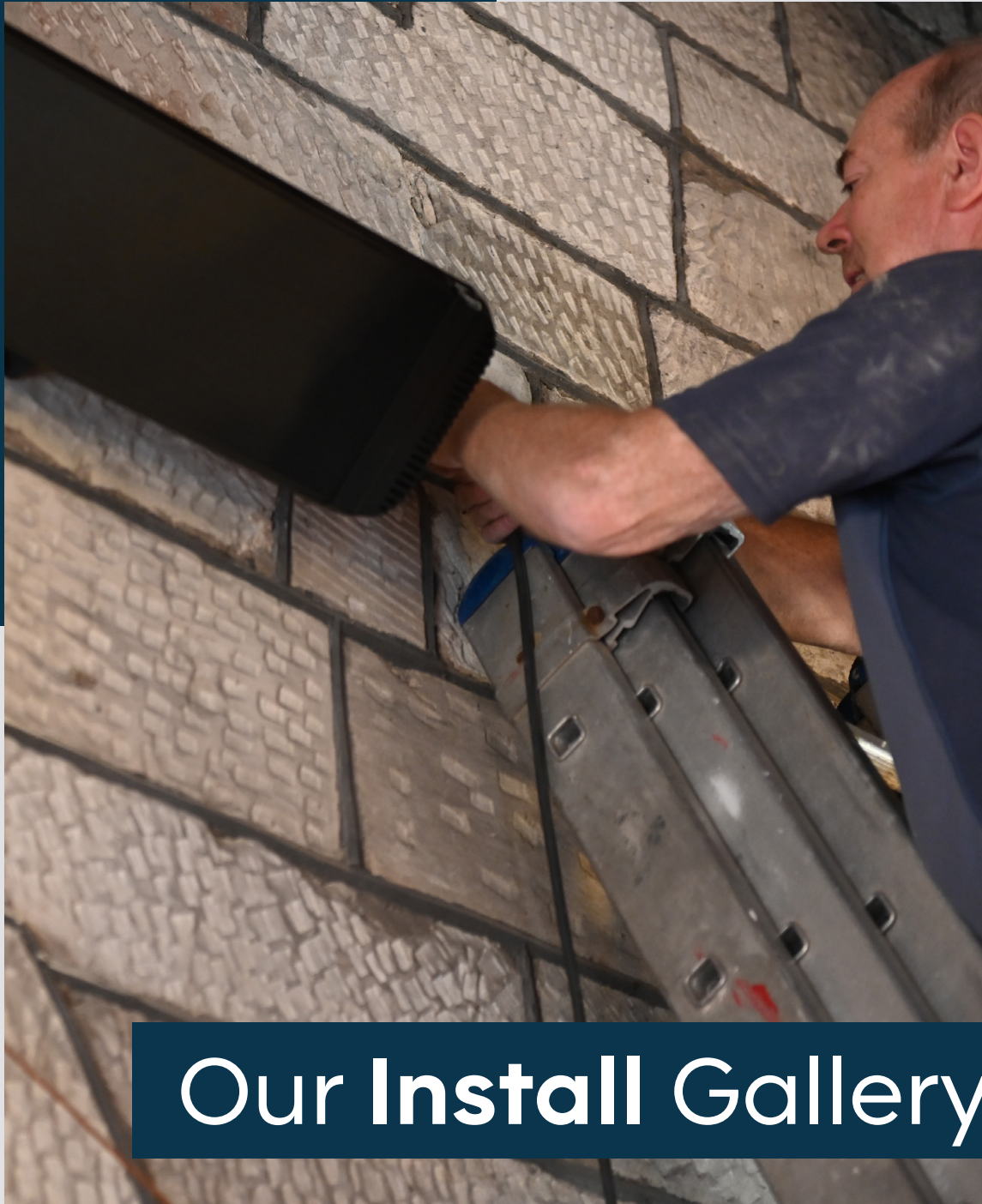
Welcome to Connect Managed Service, your sustainable solution for optimising your business's infrastructure while saving on energy costs. Our comprehensive package encompasses a variety of services, including heating, lighting, occupancy control, metering, and more, all designed to promote sustainability and maximise energy efficiency.

At Connect Infrared, we understand the importance of sustainability in today's world. That's why our package is not just about technology – it's about making a positive impact on the environment while also benefiting your bottom line. By leveraging the Operational Expenditure (OpEx) model, we enable businesses to make sustainable choices without the burden of upfront capital investments.

With our service, you can achieve significant energy savings that contribute to the monthly payback and even generate profit over time. Our advanced heating, lighting, and occupancy control solutions are designed to minimise energy consumption while maximising efficiency. Through metering and monitoring, we provide insights into your energy usage, allowing you to identify opportunities for further optimisation.

By adopting Connect Managed Service, you're not only reducing your carbon footprint but also ensuring long-term financial sustainability. Our fixed monthly payments make budgeting predictable and straightforward, while our flexible payment structure allows you to scale your sustainability initiatives as your business grows.

Create a more sustainable future while reaping the rewards of energy savings and profitability.



## Our Install Gallery







# connect<sup>®</sup> Infrared



0121 794 2081



[info@connectinfrared.co.uk](mailto:info@connectinfrared.co.uk)



[connectinfrared.co.uk](http://connectinfrared.co.uk)