# **Thermal Electric Radiator Technology**

#### **Electric Heating: How it Works**

ATC's Thermal Electric Range use a combination of convection and radiated heat, to provide an evenly distributed, comfortable warmth to any room.

#### Where to Use

Electric radiators are ideal for heating domestic and commercial settings, providing comfortable and consistent heat for spacious rooms.

#### Integrated Technology

These radiators can be used as stand-alone heaters or part of a whole-house heating system, **with selected heaters** operated by an app.

#### What's Inside?

Thermal electric radiators are oil filled, encased in aluminium, and contain an electric element.



#### **Did you Know?**

There are 3 basic methods of heat transfer: Conduction, Convection, and Radiation. ATC's Electric Thermal Radiator Range uses:

#### Convection

The transfer of heat through the physical movement of air or fluid from one location to another.

#### And

#### Radiation

The transfer of heat by electromagnetic waves.



### **Thermal Radiator or Panel Heater?**

#### What Are the Key Differences?



#### Thermal Electric Radiator Varena

- Robust, modern design
- Uses combined convection
   & radiant heating method
- Provides gradual warmth
- Lower running costs

#### Provides great levels of comfort & warmth in spaces that are used frequently.



Ideal for:

Kitchens



Receptions



Living Rooms



Offices



Panel Heater Almeria ECO

- · Lightweight, sleek design
- Uses convection heating method
- Provides immediate heat
- Low purchase cost

# Effectively heats spaces that are used sparingly

Ideal for:





Bedrooms

Utility Rooms



Staircase Landings

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Spare Rooms

### Thermal Radiators & Panel Heaters

Complementing one another in the home

#### The Smart RF Residence



By using a combination of thermal electric radiators and panel heaters in settings such as the home, you avail of a comfortable, inviting warmth specifically tailored for each room.

ATC's range of Smart RF products allow for connectivity and controllability with the ability to control up to 30 heaters from your mobile phone.

Thermal Flectric Radiators and Panel Radiators can also work in tandem in settings such as hotels, offices, apartment residences, schools & universities, sports & leisure facilities, and more.

#### Suitable for:













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Hospitality



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Healthcare

Education



### Heat Distribution by Product Type

Results from the ATC test laboratory below demonstrate and compare the methods of heat distribution of different electric heaters.

#### ATC SunRay RF Thermal Radiator 750w



- A Produces warm, controlled heat that reaches maxiumum temperature of 25.5 degrees.
  - Heat is distributed evenly from heat source.

#### ATC Almeria-Eco Panel Heater 750w



- A Produces dry heat of up to 34 degrees; suitable for places that are used sparingly.
- B Heat is unevenly distributed from heat source.

# Key Features of ATC Thermal Electric Radiators

#### Smart Controllability to 0.2°C

PID controllers use a control loop feedback method to control the heating element and are the most accurate and stable type of control system, with temperature accuracy to 0.2°C.

The ATC apps allow online programming from anywhere in the world. The radiator can also be controlled directly via controls on the heater.

#### **Controllability & Connectivity**

ATC Thermal Electric Radiators offer a wide range of connectivity options. We offer a diverse selection of products with varying levels of controllability and connectivity options. Choose from direct control via the radiator's control screen right through to Smart Technology that can be connected and controlled on-the-go via your smart device.

#### Accessible Technology

- Easy to read, modern TFT Display
- Manual Boost allows quick operation outside of programmed times
- Triac thermostat ensures long life & silent control
- Audible feedback confirms buttons which have been activated

#### Warranty Information





iLifestyle & Varena

Sun Ray RF & Neptune



# **ATC Smart Technology**

#### Connectivity: The Power of RF Radio Frequency Technology

Radio Frequency (RF) products communicate using a smart and robust RF Mesh gateway which allows for a more reliable and longer-reaching communication path between the heaters and the gateway.

#### The Power of Wifi Direct Technology

Our Wi-Fi Direct products operate directly between each heater and the Wi-Fi router, ideal for single heaters with no need for a gateway

#### Easy to Program & Install

Ease of set-up is a key point in the design of the ATC Smart Family of products.

Simple and robust mounting hardware with secure locking brackets ensure that these products sit perfectly and safely within the spaces they provide warmth.

The set-up and programming of both Wi-Fi Direct and RF-wireless systems is simple and intuitive, requiring minimal effort.

Easy to transport and easy to install.

#### **Control at your Fingertips**

Gain complete control over your heating systems through our ATC Smart Apps: Tevolve (RF) and ATC Cala (Wi-Fi Direct).

- TRIAC electronic thermostat accurate to 0.2°C
- PID Intelligent Control
- Open Window Feature
- Adaptive Start
- Frost Protection for holiday
  homes





ATC Tevolve App – RF Products

ATC Cala App – Wi-Fi Direct Products

