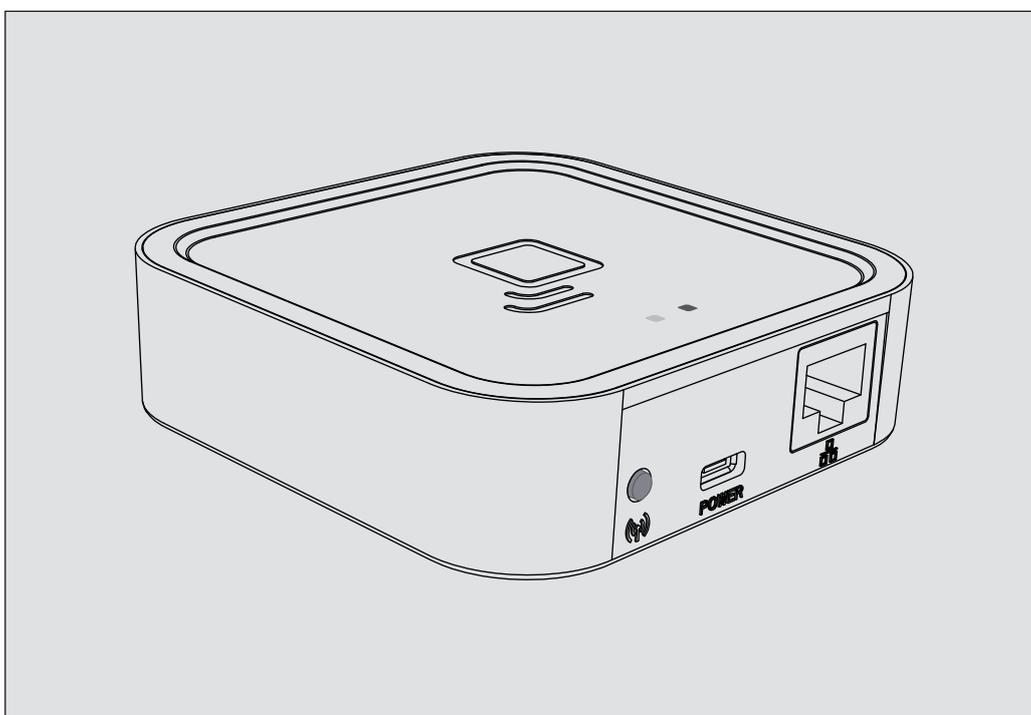


ehc
the electric heating company

eco SAVE[®]

Smart WIFI Kit
Installation Instructions



NOTE

A qualified electrician must carry out the installation of the Power Meter. The Electrical installation must comply with the current UK regulations to BS.7671. Any claim on the warranty could be invalid if these requirements have not been met.

The eco SAVE smart system allows you to program, control and monitor your eco SAVE Heaters from anywhere in the World. This can be done through a Smart Phone, Tablet or Computer when connected to the Internet.

The SmatHome system has the capacity to monitor and restrict the maximum power load that can be drawn from the heating system at any given time protecting the overall power loading of the property.

INDEX

INTRODUCTION	2
REQUIREMENTS	3
SETUP	4
PAIRING	5
LOAD SHEDDING	6
POWER METER	7
TECHNICAL	9
NOTES	10

REQUIREMENTS

Gateway:

To operate the eco SAVE Smart gateway you will require a Broadband Internet Connection. The Gateway can then be connected to a free LAN port on your router using the supplied Ethernet cable. The Gateway comes supplied with a Micro USB Power Cable and 230 volt power adapter.

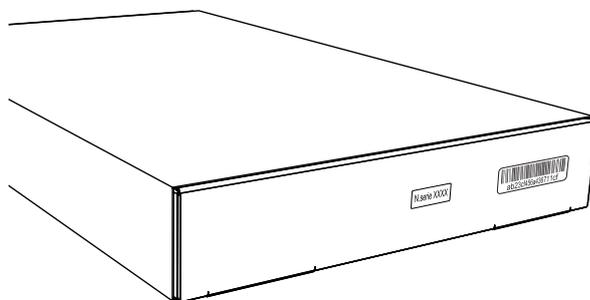
Note:

The DHCP server within the router must be activated, there must be a direct Internet connection without passing through a proxy. Output ports, 123 UDP - 3000 TCP must be open. (Check with Router Manufacturer)

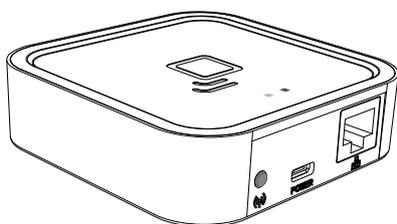
The Power Meter must be only be installed by a qualified electrician in accordance to I.E.E. regulations BS 7671.

Getting Started:

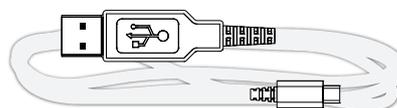
Remove the packaging and check that all contents are correct.



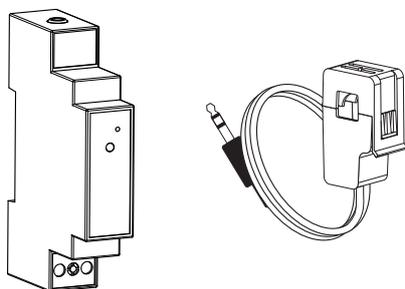
1. Smart Gateway



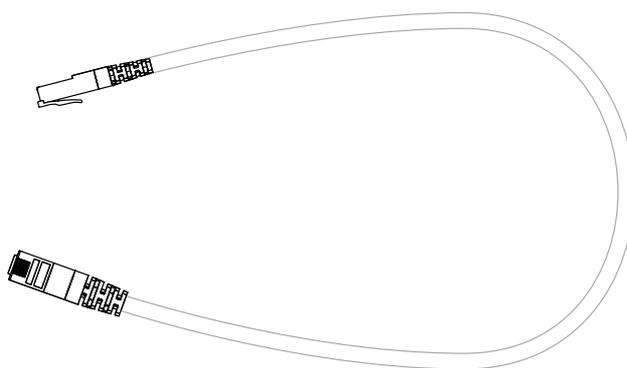
4. USB Cable



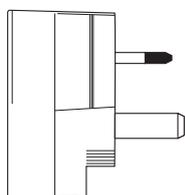
2. Power Meter & Cable Clamp



5. Ethernet Cable



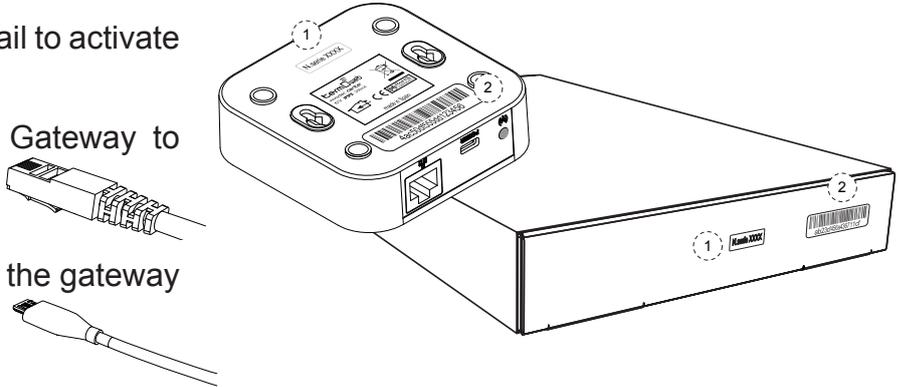
3. USB Adapter



Note: Do Not Power Up the Gateway at this stage!

Register the eco SAVE Gateway online @ www.electric-heatingcompany.co.uk/download

1. Click on the Register Icon.
2. Enter a valid email address for your account.
3. Enter a Password and Confirm your Password.
4. Enter the Serial No (See 1 Below)
This Appears on the packaging and on the Gateway
5. Enter the Device ID (See 2 Below)
6. Enter your Location details:
(This will determine your Time Zone and weather forecast from the Internet)
7. Once your data input is complete, "Click Register" In a few minutes you will receive a confirmation e-mail. If this does not happen, check your SPAM folder.
8. Confirm the Link within your e-mail to activate your account.
9. Connect the eco SAVE Smart Gateway to your broadband router with the Ethernet cable supplied.
10. Connect the Micro USB cable to the gateway and to the power adapter supplied.
11. Power the gateway.



When the eco SAVE Smart Gateway is first connected the device will try to communicate and link with the server, you will see a sequence of LED's blinking on the gateway.

Gateway LED Status

Green off, Orange flashing one second: discovery status (device pairing).

Orange on, Green flashing 0.2 seconds: the router has not assigned an IP address to the gateway.

Orange on, Green flashing briefly every 5 seconds: the router has assigned an IP address to the gateway correctly, but there is no communication with the server.

Orange on, alternating with green flashing briefly every 5 seconds: the Gateway has connected to router correctly and has internet connection.

Note:

It is preferable to register the gateway before installing it. If it is registered after installation it may take a few minutes to become accessible via the web, if you do not want to wait, disconnect and reconnect the power supply to the gateway.

PAIRING

Once the eco SAVE Smart Gateway is connected to the Internet and fully registered, you can now pair it with the eco SAVE Heaters and the Power Meter.

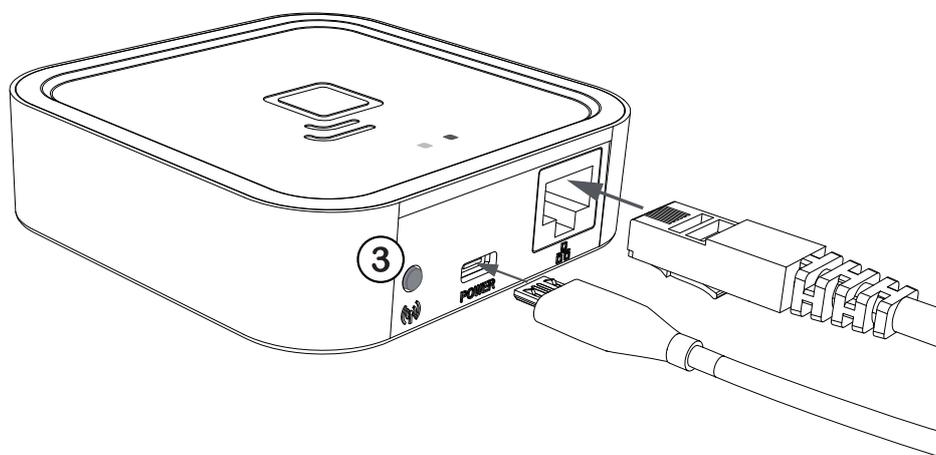
There are 2 ways that you can put the eco SAVE Smart Gateway into pairing mode.

Option 1. You can simply press button (3) on the gateway as shown below, the gateway will now begin searching for external devices.

Option 2. On your Computer, Smart Phone, or Tablet, select Devices then click on the +Add icon this will also put the eco SAVE Gateway into pairing mode.

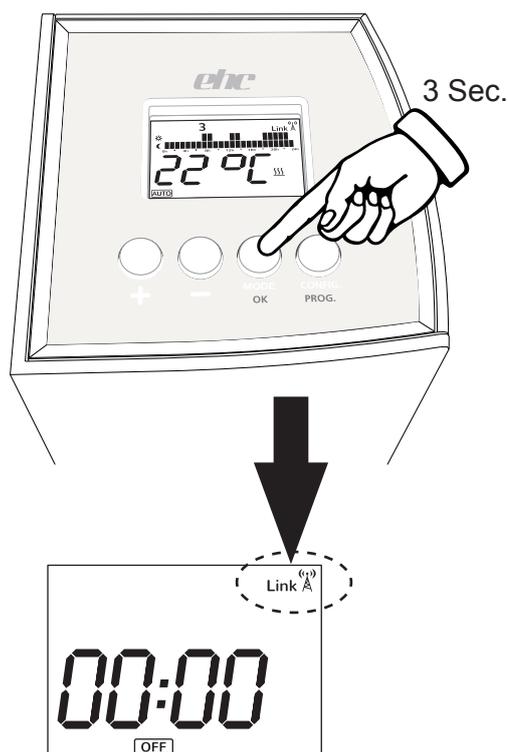
An Orange LED on the Gateway will start to flash.

You have 1 minute to add a device at this stage. For each additional new device that is added the available time increases as you go through the pairing process.



Pairing a Heater with Gateway.

When the Gateway is in pairing mode, Simply press and hold the **OK** button on the Heater for 3 seconds when the Heater is in one of the main modes, (**OFF,AUTO,MANUAL**) The Antenna symbol  will appear in the top right corner of the display when it has connected to the Gateway as shown below.



1. From your Computer, Smart Phone or Tablet. Select the Devices icon . Within this section you have options to Add Device - Name - Prioritise or Set the Maximum Power of the heating system.
2. Click the Radiator Icon,
3. Click See Radiators.
4. Click on your New Radiator.

From a Desktop Computer click Edit to Name and if required select the Priority level. Click OK to save. From Smart Phones or Tablets you will already be in the Edit screen, you can now Name and if required select the Priority level of the Radiator. Accept to save

Priority:

The Radiators are set with “No Priority” by default. If you require to prioritise Radiators you can select priority levels between 1-30.

The priority of each Radiator depends on 3 factors:

1. Temperature difference between the set point and the environment.
2. The value of the priority assigned to each Radiator. By default all Radiators start with no priority level.
3. If a Radiator is already activated. An active Radiator has a higher priority than other Radiators.

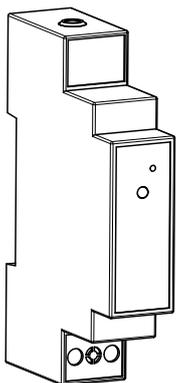
Max System Power: (Load Shedding)

You can set the maximum power that can be drawn from the Radiator system by selecting,

1. Devices
2. Radiator Icon
3. Edit
4. Enable power limit
5. Set System maximum Power
6. OK to save from Desktop Computers and Accept from Smart-phones & Tablets.

MAXIMUM AVAILABLE POWER

Note: Installation of this device must be carried out by a competent electrician in accordance with I.E.E. Regulations for Electrical Equipment. BS:7671



Power Meter

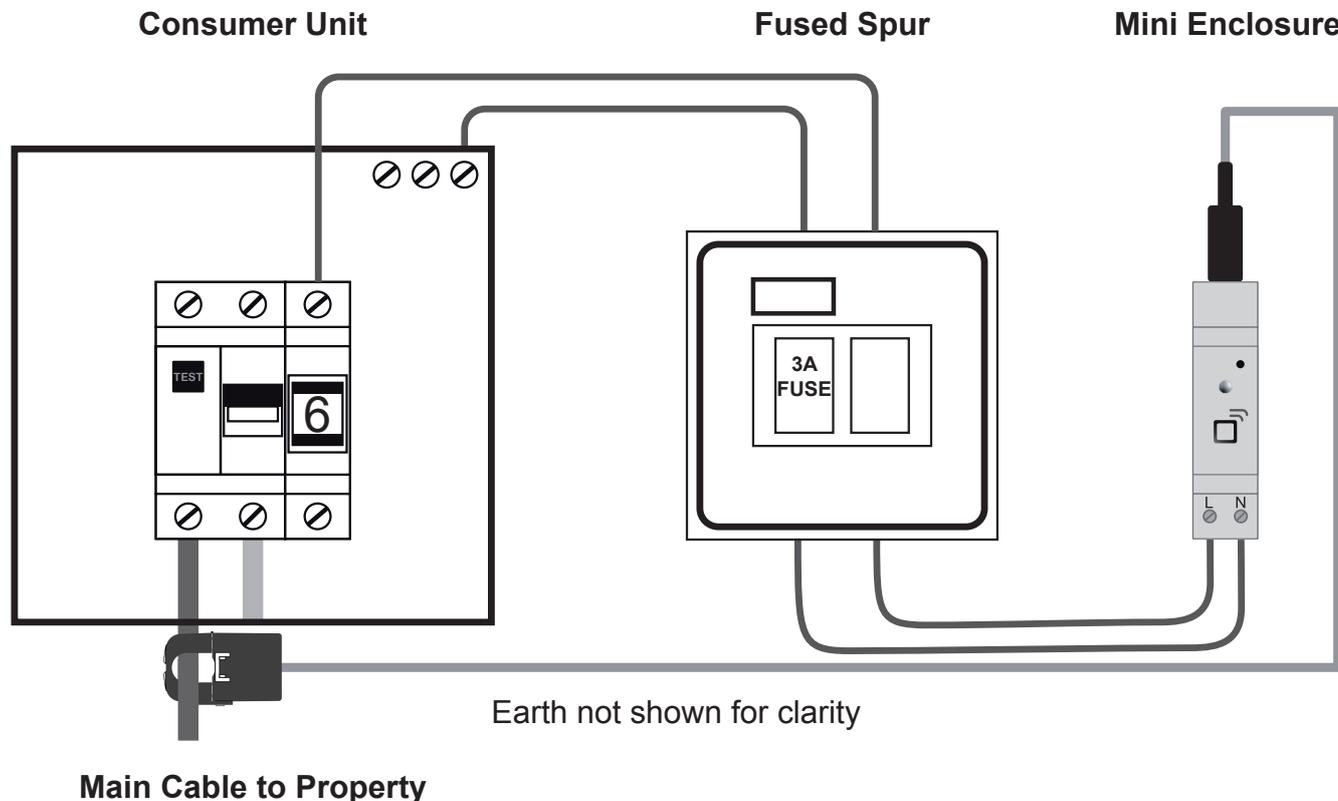
The Power Meter is a device that monitors and helps to protect the main power supply to the property. From a Computer, Smart phone or Tablet you are able to access and view your total home or heating systems electrical consumption at any given time.

Installation of Power Meter

The power meter should be connected to a spare 6 amp Mcb or Rcb0 within the properties Consumer Unit. This supply should then be taken and connected to a fused switched spur with a minimum contact of 3mm and fuse rated to 3amps. From the fused spur take a supply cable to the Power Meter that should be mounted within a mini enclosure. Live and Neutral connections are clearly marked at the bottom of the device.

(Take care not to damage the Terminals when connecting the power cable to the Meter)

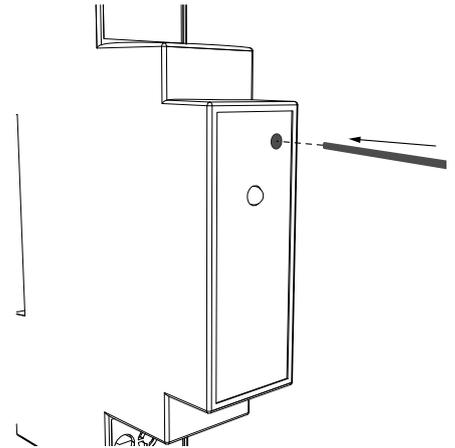
Typical Layout:



Power Meter Setup

After the installation of the Power Meter is complete, Pair the device with the gateway as follows:

1. From your Computer, Smart Phone or Tablet. Select the Device icon.
2. Click +Add. An Orange LED on the **Gateway** will start to flash.
3. Now Press the Small button on the front of the Power Meter with the paper clip provided. (short press)
4. The Power Meter Icon will appear on your display.
5. The Power Meter is now Paired.



Setting Maximum Power

You can set the maximum overall power that can be drawn from your property by selecting,

1. Devices.
2. Electricity Meter.
3. Edit.
4. Now set the maximum level. OK to save from Desktop Computers and Accept from Smart-Phones & Tablets.

Status of the Power Meter LED

Not paired: LED off

Paired correctly: the LED flashes once every two and a half seconds.

Paired but lost: the LED flashes once every half a second. This happens when the SmartHome Gateway is disconnected. Once communication with the Gateway becomes available, the Power Meter will connect again automatically.

TECHNICAL CHARACTERISTICS

eco SAVE Smart Gateway

- Desktop or wall placement
- Power supply: 5V 500mA micro USB external current adapter
- Dimensions: 80x80x22mm.
- RJ45 connector for Ethernet connections
- Communication Frequency: 868MHz
- Operating Temperature 0 °C to 60 °C
- Storage Temperature -20 °C to 85 °C

Power Meter

- DIN Rail placement. 1 Rail module necessary
- Power Supply 200-260 V ~ 50 Hz
- Consumption 0.90W
- Communication Frequency: 868MHz
- Measurement: CAT II
- Voltage and Current, up to 80A-AC
- Instantaneous Active Power
- Accumulated Active Energy
- Error: <3%
- Operating Temperature: 0 °C to 60 °C
- Storage Temperature -20 °C to 85 °C
- Impact Strength: IK06

Clamp Sensor

- External current transformer with measurement range between 0 and 100A AC. Connection with 3.5 mm jack
- Cable measurement capacity: \varnothing 12mm, maximum commercial section 95mm²

Misuse or failure to follow the guidelines set out within this Manual may invalidate your Warranty.

(Waste Electrical & Electronic Equipment)

(Applicable in the European Union and other European countries with separate collection systems)

This marking shown on the product or its literature, indicates that it should not be disposed of with other household wastes at the end of its working life.

To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources. Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal of the purchase contract.



GUARANTEE

Your EHC eco SAVE Smart Gateway and Power Meter are guaranteed for 12 months from Date of Purchase.

Any unauthorised repair or attempted repair will invalidate the Guarantee. You may be asked to return the product to EHC for inspection to establish whether the fault is covered under the Guarantee.

The Guarantee is valid in the UK only.

This Guarantee is additional to your Statutory Rights.

In the unlikely event of a problem with your product please contact your supplier.

ehec

the electric heating company

Block 5, Unit 40, Third Road
Blantyre Industrial Estate
Blantyre · G72 0UP · United Kingdom

TEL. 01698 820533

info@electric-heatingcompany.co.uk

www.electric-heatingcompany.co.uk

Installed by :