

Appendix document

Full Switchchee thermostat device data sheet

Important Safety and Product Information

1. This product is exclusively for use in the UK, EU, Channel Islands and the Isle of Man.
2. **WARNING:** To avoid risk of suffocation, do not leave small parts such as packaging remnants, tools used to open the packaging or any removable items within the reach of children.
3. **WARNING:** The ECP4159FP (UK) or ECP4197FP (EU) power supply must not be used with other equipment.
4. Only use the power supply [ECP4159FP (UK) or ECP4197FP (EU)] supplied with the Switchchee system.
5. In case of a defective system do not attempt to repair your device. Instead contact Switchchee on support@switchchee.com or **0800 133 7957**.
6. The Switchchee system cannot be modified by the user. Never remove the cover of any assemblies or power supply. There are no user-serviceable parts inside and there are high voltage live parts in the Receiver Unit and power supply.
7. Product tested and meets the requirements of standard: BS EN 62311:2020 Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz to 300 GHz). The system sporadically transmits data, therefore average transmit power is very low compared to accepted standard limits.
8. A copy of Switchchee's declaration of conformity can be found at this web address: www.switchchee.com/compliance
9. This product must be used indoors.
10. **CAUTION:** this product includes wireless radio technology with restrictions for its use. Please observe the following: This product must be installed a minimum distance of 20cm away from users.
11. Never place naked flame sources, such as lit candles, on or adjacent to your Switchchee system or power supply.
12. The system can be used with the following Z-wave sensors: 100009 Aeotec Energy Clamp – 60A (AEQ_ZW0951C60A), 100010 MCO Home CO2 Sensor (A8-7).

Wireless radio

Cellular Radio:

GSM900: 33 dBm $\pm$ 2 dB	LTE-FDD Band 7: 23 dBm $\pm$ 2
GSM1800: 30 dBm $\pm$ 2 dB	LTE-FDD Band 8: 23 dBm $\pm$ 2
LTE-FDD Band 1: 23 dBm $\pm$ 2	LTE-FDD Band 20: 23 dBm $\pm$ 2
LTE-FDD Band 3: 23 dBm $\pm$ 2	

ISM Short Range Radio 1:

869.85MHz, 13dBm
868.40MHz, 13dBm
868.42MHz, 13dBm

ISM Short Range Radio 2:

868.25MHz, 13dBm

Energy consumption information - information - The power consumption of your Switchchee system when in standby is less than 2 watts. This equates to an average running cost of less than 7.7 pence per week or £3.98 per year based upon UK average electricity prices in 2023/24 as published by Department for Energy Security and Net Zero.

Waste Electrical and Electronic Equipment (WEEE) Recycling

The WEEE symbol on the product indicates that the product must not be disposed of with normal household waste.

Instead, such marked waste equipment must be disposed of by arranging to return to a designated collection point for the recycling of waste electrical and electronic equipment.

Separating and recycling this waste equipment at time of disposal will help to conserve natural resources and ensure that the equipment is recycled in a manner that protects human health and the environment.

Switchchee offers our customers the opportunity to return products at the end of their functional lives for recycling.

Qualifying products are marked with the WEEE symbol shown above. Delivery cost of any authorised product returned to Switchchee will be at the expense of the sender.

Normal product returns policies apply with pre-authorisation required in the form of an RMA number without which the product will not be accepted.

Purpose of control: Automatic electrical thermostatic control of heating system.

Control of the unit and response times are faster than required by the expected ambient temperature rise.

Misc. technical Information:

- Intended for continuous use.
- Operates between 0°C and 55°C as set by the user on the display. There will be no increase in this operating value in the case of failure of the temperature sensing equipment.
- This control provides a type 1 switching action.
- The maximum intended click rate for the relays is 1Hz.
- The central heating relay is rated for 100,000 operations.
- At the expected switching rate of once per hour, the unit is expected to have a service life of 11.4 years.
- Relay contacts provide micro-interruption only and do not provide disconnection.
- The state of the control during transportation is not critical.

Desired temperature: The desired temperature can be set from 0°C to 30°C.

Rated impulse voltage: 2.5kV.

Internal fuse: Internal 1A fuse non-replaceable.

Rated loads for relays: 240V ~ (AC) or 30V DC, 1A (Resistive)

Pollution degree: 2.

Electric shock protection: Independently Mounted Class I Equipment.

Surge immunity category: Installation Class 2 or Residential.

Rated voltage: 115–240V ~ (AC), 50/60 Hz.

Limits of power output from BRU: Safe Extra Low Voltage (SELV) limits power output from receiver unit to thermostat are 12V DC, 0.15A on all SELV terminals (0V, H2, W1 and +12V).

Method of earthing: Non-functional ground terminal.

MCO CO2 Sensor

Model:

MH5-2A, MH5-4A, MH5-2D, MH5-4D, MHs-TA, MHs-TD, MI I5-M1, MH5-M2, IVIH5-WH, MHs-EH

Voltage:

85-260V-50 | 60Hz, 3A (Max),

Frequency:

868.4MHz

Aeotec Energy Meter

Model number:

ZW095

Product Weight:

574 g

Total Package Weight:

745 g

Product Dimensions:

99 x 66 x 34 mm

Package Dimensions:

185 x 170 x 65 mm

UPC /EAN**EU 3P4:**

1220000015548

EU 1P:

1220000014381

Powering Method:

EU - Wire In

Input (voltage, frequency, max current consumption):

230V~, 50Hz, 10mA (EU version, 1P/3P4)

Standby consumption:

< 1.8W.

Measure range of voltage:

180V~ to 260V~ (EU version, 1P/3P4)

Measure range of current:

0A to 200A.

Measurement Accuracy:

Over 99% (if current is greater than 0.05A).

Operating humidity:

8% to 80%.

Operating temperature:

0°C to 40°C

32°F to 104°F.

Operating distance:

Up to 427 feet outdoors.

Up to 130 metres outdoors.