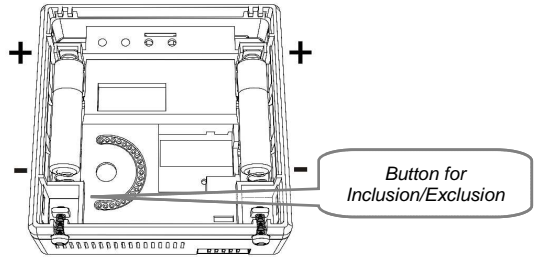
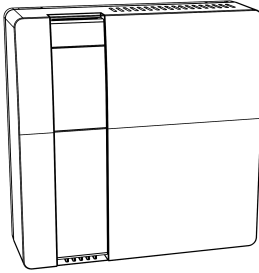




SES 301 Wireless Temperature Sensor



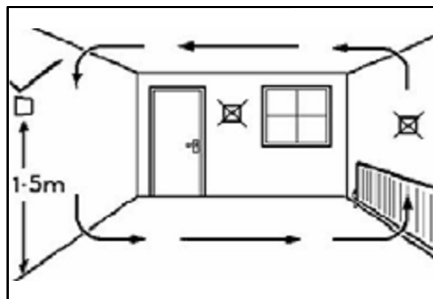
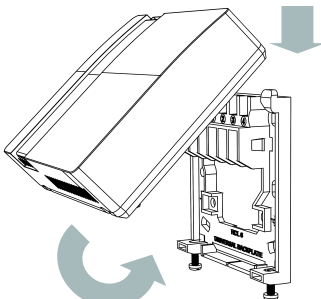
Z-Wave® Commissioning Notes

SES 301 is a battery-powered temperature sensor that uses Z-Wave® technology low-power radio signals to transmit temperature data to a Controller.

SES 301 does not need any wiring, but we recommend that it should be installed by a qualified electrician with current approval under Part P of the UK Building Regulations (2005).

1. Install the two AAA batteries supplied with the unit, taking care to observe the polarity markings.
2. Include the SES 301 onto a network. Put the Controller in Include mode and press the button inside the unit for 2 seconds. The Controller will show when the unit is linked.
3. Choose the position where the unit is to be mounted. Avoid locations alongside or behind large metal surfaces that could interfere with the low-power radio signals between the unit and the Controller. The SES 301 should be mounted on an internal wall, around 1.5 m above floor level and in a position away from draughts, direct heat and sunlight. Make sure that there will be sufficient space around the unit to allow easy access to the two retaining screws on the base of the wall plate.
4. Fit the wall plate to the wall and then fit the SES 301 on to the wall plate. Secure it in position by tightening the two captive screws.

If the unit needs to be excluded from a network, put the Controller in Exclusion mode and press the button on SES 301 for more than 2 second. The Controller indicates when the process is completed



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The device classes supported are given below.

Z-Wave Device Classes	Implemented Device Class
Generic	Multilevel sensor
Specific	Routing Multilevel sensor
Basic	Routing Slave
Command Classes Supported	Description
Manufacturer Specific	Secure Controls (UK) Manufacturer ID
Version	Provides the version number of the software
Multilevel Sensor	Supports Multilevel Sensor GET and Multilevel Sensor REPORT. The report carries the measured temperature as a 2-byte signed number (in °C or °F) with a precision of 1 decimal place. The report can be requested (or sent unsolicited) to the nodes in Group 1.
Battery Level	Supports GET and REPORT, for battery level in the range 0-100%. Low Battery Warning is reported (with parameter = 0xFF) to the nodes in Group 2 if the battery voltage is less than 2.5 volts.
Wake Up(Ver 2)	Wake Up Capabilities Report, supports wake up intervals in steps of 10s, with a default setting to 24 hrs, any received out of range wake up interval will be ignored.
Basic	Mapped to the Multilevel Sensor Command Class as follows: <ul style="list-style-type: none"> o Basic SET: Not Supported o Basic GET: Multilevel Sensor Get o Basic REPORT: Multilevel Sensor Report
Association	Two association groups are supported: Group 1 - Nodes to receive unsolicited multilevel sensor report. Group 2 - Nodes to receive unsolicited low battery warnings report. Each group contains a maximum of 4 nodes
Configuration	Two single-byte configurations are supported for the temperature sensor functionality <ol style="list-style-type: none"> 1. Configuration Parameter Number 1, temperature scale: <ol style="list-style-type: none"> a. 0 to 127 (0x00-0x7F) = Celsius b. -128 to -1 (0x80-0xFF) = Fahrenheit c. Default value is 0 2. Configuration Parameter Number 2, delta temperature: <ol style="list-style-type: none"> a. Can set in the range 1 to 100, in 0.1 degree steps b. Default value is 10 (1.0 °C).

Note: All command classes are version 1 unless otherwise stated.

Technical Information

Dimensions (WxHxD)	86 x 86 x 30 mm	Power supply	2 x AAA alkaline cells
Measurement accuracy	±0.5 °C	Transmitter frequency	868 MHz
Pollution control degree	2	Design standard	EN 60730-2-9
Enclosure protection	IP30	Operating range	0 °C to +40 °C
Enclosure material	Flame-retardant thermoplastic		



Please dispose of this unit (and the batteries that it contains) responsibly.



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