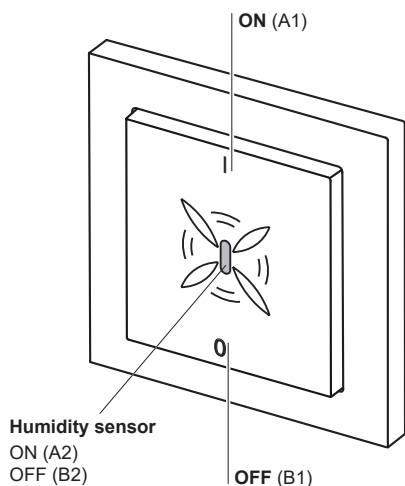


Models



Humidity sensor
ON (A2)
OFF (B2)

SH01E5002-01

Technical details

Frequency:	868.30MHz
Radiated power:	0.54 mW
Modulation:	FSK
Coding:	2x Easywave A/B
Power supply:	1x 3V-battery, CR2032 or alternatively 12-24 V AC/DC SELV approx. 15 mA
Current consumption:	approx. 15 mA
Measuring range:	1-99% rH
Accuracy:	±5% (at 30%-70% rH)
Thresholds:	1. >74% rH 2. fast rise of 4% when >40% rH
Measurement:	every 2 min
Oper. Temperature:	-20 °C to +60 °C
Range:	free-field: approx. 150 m buildings: approx. 30 m
Degree of protection:	IP30
Dimensions (w/h):	
Sensor module	55/55/10.0 mm
Mounting plate	71/71/1.8 mm
Cover frame	80/80/9.4 mm
Weight:	36 g (incl. battery and cover frame)

Scope of delivery

Sensor module, battery CR2032, mounting plate, button, adhesive pads, cover frame, operating instructions

Intended use

Only use the humidity sensor SH01 in indoor rooms to switch Easywave receivers. The manufacturer shall not be liable for any damage caused by improper or non-intended use.

Safety advice

- Before using the product, carefully read through the operating instructions!
- Also note the operating instructions of the receivers!
 - The radio humidity sensor may only be operated within sight of the devices to be controlled! Otherwise persons could be placed in danger!
 - Do not make any unauthorized alterations or modifications to the radio humidity sensor!
 - Have faulty radio humidity sensors checked by the manufacturer!
 - Keep the batteries out of the reach of children!

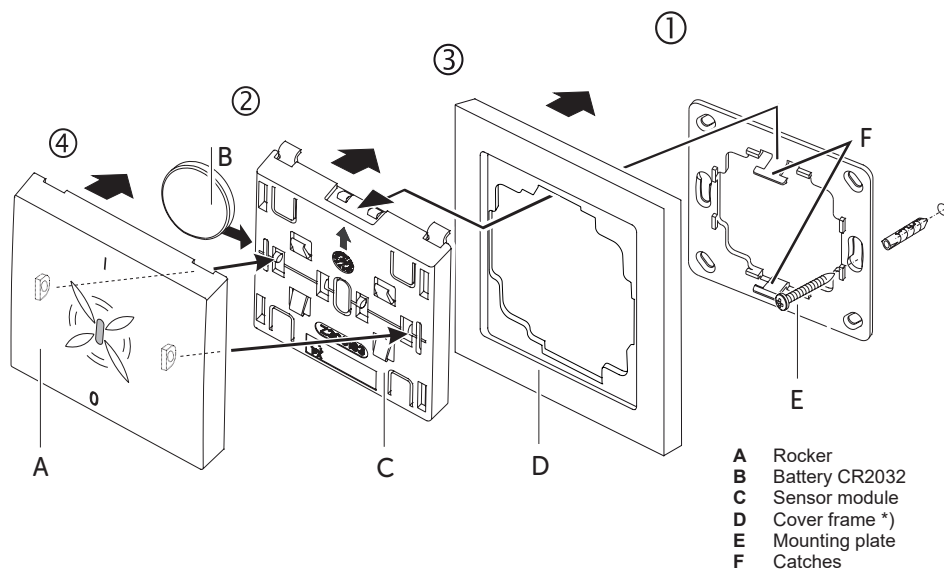
Function

The wireless humidity sensor SH01 is a combination of a humidity sensor and a push button. Both, the humidity sensor and the push button, have their own transmission code. The transmission code of the push button is referred to as A1 and B1 and the transmission code of the sensor is referred to as A2 and B2.

The humidity sensor measures the relative humidity (rH) periodically and sends a transmission code to an Easywave wireless receiver when exceeding and/or reaching defined values. This can then switch connected ventilation devices like e.g. fans or electric window openers.

Start-up

1. Screw or stick the mounting plate to the installation site with screws and dowels or the adhesive pads.
Caution: Make sure there is no interference with the wireless connection. Do not mount the device in a distribution box, in metal casings, in direct proximity to large metal objects, on the floor or close to it.
2. Insert the battery into the sensor module (see chapter „Insert / change battery“) OR connect an external power supply (see chapter „External power supply“).
3. Place the cover frame onto the mounting plate and snap the sensor module to the catches on top and bottom. **The arrow on the sensor module has to point upwards.**
4. Snap the rocker onto the sensor module.
5. Program the transmission codes of the sensor and the button into the desired receiver. Please read the chapter „Program sensor transmission code“ or „Program button transmission code“ and the instructions supplied with the receiver.



*) If necessary, the cover frame can be replaced with frames from other manufacturers with a cut-out size of 55x55 mm.

The push button function is a standard Easywave application for turning electric consumers ON or OFF manually with the 2-button operation. When pressed, the „I“ button sends the Easywave transmission code A1 (ON) and the „0“ button sends the transmission code B1 (OFF). A cover frame is included in the scope of delivery. Cover frames with a cut-out dimension of 55 x 55 mm produced by various other manufacturers can also be used. Please note the compatibility list for transmitters of format 55.

Humidity monitoring

The wireless humidity sensor monitors the relative humidity (rH) and sends transmission signals according to the measured values:

Measured value below 40% rH
The humidity sensor does not react in this range.

Measured value from 40% rH to 74% rH
In this range the humidity sensor reacts to a sudden rise in humidity. If the relative humidity rises 4% rH within two minutes (e.g. when showering), the transmission code A2 (ON) is sent. Once the humidity level approaches the initial value again, the transmission code B2 (OFF) is sent.

Measured value above 74% rH
If 74% rH are exceeded, the sensor sends the transmission code A2 (ON). If the relative humidity drops below 72% rH, the humidity sensor sends the transmission code B2 (OFF). If the relative humidity does not drop below 72% rH within four hours, the sensor will send the transmission code B2 (OFF) regardless.

Program sensor transmission code

There are two possibilities to program the transmission code of the sensor into an Easywave radio receiver.

Programming by button press

1. Press the button on the top side (I) for approx. 5 seconds until the LED in the humidity sensor lights up.
2. Put the radio receiver into programming mode and then press the button on the bottom (O). You have 10 seconds to complete this procedure. The transmission code B2 is transmitted to the receiver and the LED turns off after 10 seconds.

Programming by inserting battery

Two seconds after inserting the battery, the Easywave transmission code B2 is sent automatically and can be programmed into the receiver.

Program button transmission code

1. Put the radio receiver into programming mode.
2. Press the upper button (I) briefly, the transmission code **ON** (A1) is sent.
3. The Easywave transmission code A1 have been programmed into the receiver.

Insert / change battery

1. Lever off the sensor module from the mounting plate.
2. Replace the battery. Only use batteries of the type CR2032. Make sure the polarity is correct. **The positive pole has to be visible!**
3. Replace the sensor module back onto the catches.

Note: Two seconds after inserting the battery, the Easywave transmission code B2 is sent automatically.

Trouble shooting

If the receiver does not react to the radio humidity sensor:

- Change the battery.
- Check that the wireless connection at the installation site is not impaired between the radio humidity sensor and the receiver.
- Program the transmission code into the receiver again.
- Other wireless devices using the same frequency and working in direct proximity may interfere with the device.

External power supply

The humidity sensor can also be operated with 12-24 V AC/DC safety extra-low voltage SELV.

Use flexible equipment wires with a cable cross section of 0.5 to 0.6 mm for this purpose. The specified stripping length for the wires is 8 mm.

1. Lever off the sensor module from the mounting plate.
2. Remove the battery and insert the wires into the terminal contacts KL1 and KL2 on the circuit board. The wire is clamped into the spring contact on the rear and cannot be removed again without destroying it. The polarity does not have to be taken into account. The terminal contacts are double to allow the supply voltage to be looped through.
3. Re-attach the sensor module to the catches of the mounting plate.

Note: Two seconds after activating the supply voltage, the Easywave transmission code B2 is sent automatically.



If an external power supply is connected, **DO NOT** insert a battery!

Disposal

Waste electrical products and batteries may not be disposed of with household waste!

Dispose of the waste product via a collection point for electronic scrap or via your specialist dealer.



Dispose of used batteries in a recycling bin for batteries or via the specialist trade. Put the packaging material into the recycling bins for cardboard, paper and plastics.



Warranty

Within the statutory warranty period we undertake to rectify free of charge by repair or replacement any product defects arising from material or production faults.

Any unauthorized tampering with, or modifications to, the product shall render this warranty null and void.

Conformity



Hereby, ELDAT EaS GmbH declares that the radio equipment type SH01 is in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following internet address: www.eldat.de

Service

If, despite correct handling, faults or malfunctions occur or if the product was damaged, please contact the company at the address below:

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15745 Wildau

Germany

Phone: +49 3375 9037-310

Internet: www.eldat.de

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