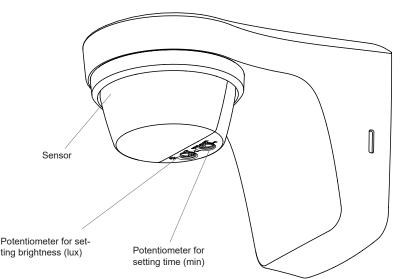
EN SM01 Motion detector

Model



SM01E5001A01

Technical Details

Frequency:	868.0 MHz
Radiated power:	0.49 mW
Modulation:	FSK
Coding:	Easywave A/B
Radio range:	approx. 150 m in
	free field conditions
Detection angle:	180°
Detection area:	crosswise: max. 12 m frontal: max. 5 m
Installation height:	2 m to 4 m
Creep-under protection:	yes
Brightness setting range:	5 to 1000/∞ Lux
Switching period range:	1 s to 20 min
Operating voltage:	230 V AC, +10 % to15 % 50 Hz
Power consumption:	0.8 W (standby)
Permissible ambient	
temperature:	max25 °C to +45 °C
Protection class:	П
Degree of protection:	IP55
Dimensions (l/w/h):	127/85/100 mm
Weight:	220 g
Contact load:	
Contact load: Switching capacity:	10 A (cosφ = 1.0)
	$6 \text{ A} (\cos \varphi = 0.6)$
Switching capacity:	$6 \text{ A} (\cos \varphi = 0.6)$ 3 AX ($\cos \varphi = 0.3$)
Switching capacity: Min. switching capacity:	$6 \text{ A} (\cos \varphi = 0.6)$ 3 AX ($\cos \varphi = 0.3$) 10 mA
Switching capacity: Min. switching capacity: Switching contact:	$6 A (\cos \varphi = 0.6)$ $3 AX (\cos \varphi = 0.3)$ 10 mA μ -contact 230 V AC
Switching capacity: Min. switching capacity: Switching contact: LED lamps >2 W <8 W	$6 A$ ($\cos \varphi = 0.6$) $3 AX (\cos \varphi = 0.3)$ 10 mA μ -contact 230 V AC 90 W
Switching capacity: Min. switching capacity: Switching contact: LED lamps >2 W <8 W LED lamps >8 W	$6 A (\cos \varphi = 0.6)$ $3 AX (\cos \varphi = 0.3)$ 10 mA μ -contact 230 V AC
Switching capacity: Min. switching capacity: Switching contact: LED lamps >2 W <8 W LED lamps >8 W Incandescent and	$6 A$ ($\cos \varphi = 0.6$) $3 AX (\cos \varphi = 0.3)$ 10 mA μ -contact 230 V AC 90 W 100 W
Switching capacity: Min. switching capacity: Switching contact: LED lamps >2 W <8 W LED lamps >8 W Incandescent and halogen lamp load:	$6 A$ ($\cos \varphi = 0.6$) $3 AX (\cos \varphi = 0.3)$ 10 mA μ -contact 230 V AC 90 W
Switching capacity: Min. switching capacity: Switching contact: LED lamps >2 W <8 W LED lamps >8 W Incandescent and halogen lamp load: Low-voltage halogen	$6 A (cos \phi = 0.6)$ $3 AX (cos \phi = 0.3)$ 10 mA μ -contact 230 V AC 90 W 100 W 2,300 W
Switching capacity: Min. switching capacity: Switching contact: LED lamps >2 W <8 W LED lamps >8 W Incandescent and halogen lamp load: Low-voltage halogen lamps:	$6 A$ ($\cos \varphi = 0.6$) $3 AX (\cos \varphi = 0.3)$ 10 mA μ -contact 230 V AC 90 W 100 W
Switching capacity: Min. switching capacity: Switching contact: LED lamps >2 W <8 W LED lamps >8 W Incandescent and halogen lamp load: Low-voltage halogen lamps: Fluorescent lamps	$6 A (cos \phi = 0.6)$ $3 AX (cos \phi = 0.3)$ 10 mA μ -contact 230 V AC 90 W 100 W 2,300 W
Switching capacity: Min. switching capacity: Switching contact: LED lamps >2 W <8 W LED lamps >8 W Incandescent and halogen lamp load: Low-voltage halogen lamps:	$6 A (cos \phi = 0.6)$ $3 AX (cos \phi = 0.3)$ 10 mA μ -contact 230 V AC 90 W 100 W 2,300 W
Switching capacity: Min. switching capacity: Switching contact: LED lamps >2 W <8 W LED lamps >8 W Incandescent and halogen lamp load: Low-voltage halogen lamps: Fluorescent lamps (low-loss series devices)	6 A (cosφ = 0.6) 3 AX (cosφ = 0.3) 10 mA μ-contact 230 V AC 90 W 100 W 2,300 W 2,300 VA 400 VA 400 VA
Switching capacity: Min. switching capacity: Switching contact: LED lamps >2 W <8 W LED lamps >8 W Incandescent and halogen lamp load: Low-voltage halogen lamps: Fluorescent lamps (low-loss series devices) uncorrected:	6 A (cosφ = 0.6) 3 AX (cosφ = 0.3) 10 mA μ-contact 230 V AC 90 W 100 W 2,300 W 2,300 VA 400 VA 400 VA 400 VA 400 VA (42 μF)
Switching capacity: Min. switching capacity: Switching contact: LED lamps >2 W <8 W LED lamps >8 W Incandescent and halogen lamp load: Low-voltage halogen lamps: Fluorescent lamps (low-loss series devices) uncorrected: series corrected: parallel-corrected: Fluorescent lamps:	6 A (cosφ = 0.6) 3 AX (cosφ = 0.3) 10 mA μ-contact 230 V AC 90 W 100 W 2,300 W 2,300 VA 400 VA 400 VA
Switching capacity: Min. switching capacity: Switching contact: LED lamps >2 W <8 W LED lamps >8 W Incandescent and halogen lamp load: Low-voltage halogen lamps: Fluorescent lamps (low-loss series devices) uncorrected: series corrected: parallel-corrected: Fluorescent lamps: (electronic series devices)	6 A (cosφ = 0.6) 3 AX (cosφ = 0.3) 10 mA μ-contact 230 V AC 90 W 100 W 2,300 W 2,300 VA 400 VA 400 VA 400 VA 400 VA (42 μF)
Switching capacity: Min. switching capacity: Switching contact: LED lamps >2 W <8 W LED lamps >8 W Incandescent and halogen lamp load: Low-voltage halogen lamps: Fluorescent lamps (low-loss series devices) uncorrected: series corrected: parallel-corrected: Fluorescent lamps: (electronic series devices) Compact fluorescent	6 A (cosφ = 0.6) 3 AX (cosφ = 0.3) 10 mA μ-contact 230 V AC 90 W 100 W 2,300 W 2,300 VA 400 VA 400 VA 400 VA 400 VA 400 VA
Switching capacity: Min. switching capacity: Switching contact: LED lamps >2 W <8 W LED lamps >8 W Incandescent and halogen lamp load: Low-voltage halogen lamps: Fluorescent lamps (low-loss series devices) uncorrected: series corrected: parallel-corrected: Fluorescent lamps: (electronic series devices) Compact fluorescent tubes:	6 A (cosφ = 0.6) 3 AX (cosφ = 0.3) 10 mA μ-contact 230 V AC 90 W 100 W 2,300 W 2,300 VA 400 VA 400 VA 400 VA 400 VA (42 μF)
Switching capacity: Min. switching capacity: Switching contact: LED lamps >2 W <8 W LED lamps >8 W Incandescent and halogen lamp load: Low-voltage halogen lamps: Fluorescent lamps (low-loss series devices) uncorrected: series corrected: parallel-corrected: Fluorescent lamps: (electronic series devices) Compact fluorescent	6 A (cosφ = 0.6) 3 AX (cosφ = 0.3) 10 mA μ-contact 230 V AC 90 W 100 W 2,300 W 2,300 VA 400 VA 400 VA 400 VA 400 VA 400 VA

Scope of Delivery

Motion detector, base, drilling template, mounting kit, operating manual

Intended Use

Only use the device as a motion detector for switching Easywave radio receivers or for switching directly connected electrical loads.

The manufacturer shall not be liable for any damage caused by improper or non-intended use!.

Safety Advice



Before using the motion detector, carefully read through the operating instructions!

Caution! Electrical installation may only be carried out by a qualified electrician; otherwise there is a risk of electric shock or fire.

Also note the operating instructions of the receiver(s)!

Do not make any modifications to the device! Have faulty devices checked by the manufacturer.

Only intended for installation out of arm's reach.

Function

The SM01 is a wireless motion detector and wired motion detector for automatic lighting control based on movement and brightness. It is suitable for wall mounting outdoors.

If a movement is detected while the measured brightness is below the set threshold value, the non-floating 230V relay output of the motion detector switches ON for the set time.

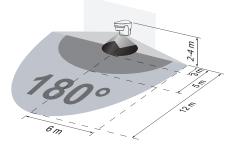
In addition, a radio telegram (Easywave code A, ON) is transmitted, which can be taught-in to Easywave receivers.

After the set time has elapsed, the relay output of the motion detector switches OFF and Easywave code B (OFF) is transmitted.

The device can be activated manually using a break switch. After releasing the button (voltage recovery), the device switches on (for at least 40 seconds, or for the time set on the device).

The motion detector has two potentiometers on the underside of the sensor, which are used to adjust the time (minutes) and brightness (lux), etc.

The motion detector's detection range is 12 m x 5 m, with a detection angle of 180°.

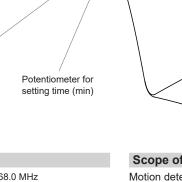


START UP

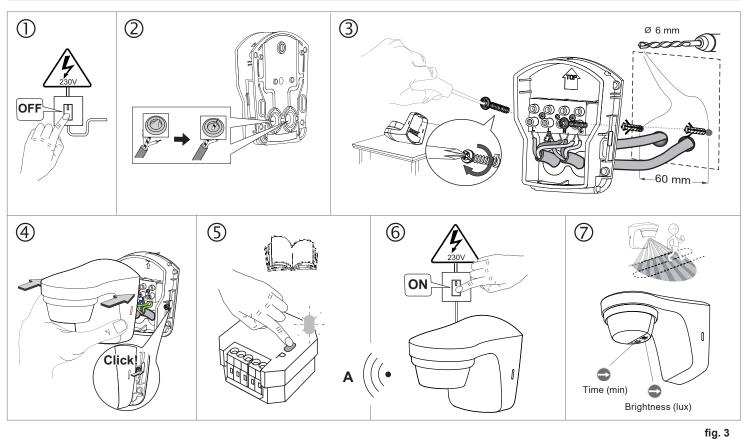
Mounting instructions

- The recommended mounting height is between 2 metres and 4 metres.
- The sensor reacts to changing heat radiation. The motion detector should therefore not be mounted near heat sources, air currents or moving objects.
- Do not direct motion detectors at objects with highly reflective surfaces (e.g. mirrors, windows, etc.).
- Obstacles (e.g. walls, glass panes etc.) do not radiate heat.
- Make sure that the wireless connection between motion detector and receiver is unimpeded. Avoid installing in the near of large metallic objects.





START UP



Installation (see figure 3)

- ① Disconnect the system from voltage and secure it against being switched on again.
- Drill the fixing holes (Ø 6 mm) into the wall following the drilling template. Remove the back of the motion detector (see "Disassembly") and pierce the membrane for the cable throughput.
- With no power running through them, run the connection cables for the motion detector and external button, if necessary through the seals. Securely screw the back of the motion detector to the wall.

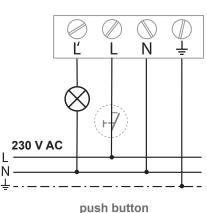
Connect the connecting cables according to the wiring diagram (see figure 2).

- ④ Place the motion detector on the base and click it into place.
- Set the Easywave receiver to learning mode for the ON/OFF operating type, 2-button operation (see receiver operating instructions). The receiver remains in learning mode for a few seconds.
- (6) Switch the power supply for the motion detector back on while the receiver is still in learning mode. The SM01 sends Easywave transmission code A and is now taught-in to the receiver.
- Conduct a walking test (see "Adjusting the detection zone") and set your preferred time and brightness settings (see "Settings").
 Do not start the walking test until the motion detector has switched off!

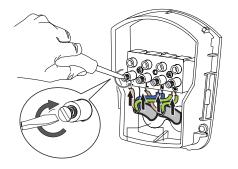


Please note that after the power supply has been switched on, the motion detector remains switched on for at least 40 seconds, or for the time set on the motion detector.

Electrical connection



(optional)





- Disconnect the system from voltage and secure it against being switched on again.
- Use a screwdriver to carefully loosen the side locking hook and pull the device forward to remove it.







fig. 2

SETTINGS

Adjust detection zone

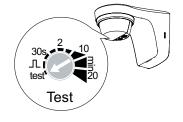
WALK TEST

The walk test is used to test the detection range and to restrict it if necessary.

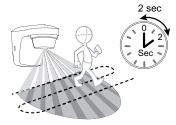


After switching on the power supply, the motion detector is switched on for at least 40 seconds or for the set time. Do not start the walking test until the motion detector has switched off!

 Set the potentiometer time (min) to test. The motion detector now only reacts to movement (independent of brightness).



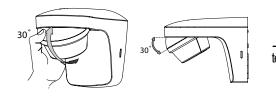
2. Walk across to the detection area. After the motion detector has detected a movement, it switches on for 2 s. Note direction of motion during the test.



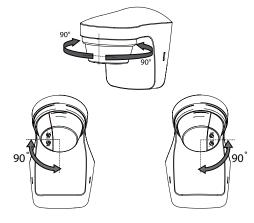
If you wish to adjust the detection range to your requirements, realign the sensor head.

ALING THE SENSOR HEAD

The sensor head can be tilted down by 30°



and left and right by 90°.



Select brightness and time values

SET BRIGHTNESS (lux)

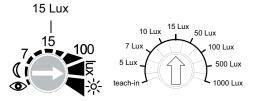
You can set different brightness values (lux) with the potentiometer.

- If you wish to change the preset brightness (15 lux default):
- Set potentiometer to desired brightness (5 – 1000 lux).

or

Wish a specific brightness value to be learned using the teach-in function:

- When the brightness is at your preferred level, set the potentiometer to O.
 The value will be learned after 15 seconds.
 - Leave potentiometer at position **O**.



SET TIME (min)

If the motion detector detects no further movement, it switches off after the set time.

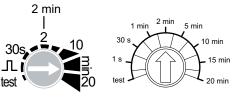
If you wish to change the preset time (2 min default):

- Set potentiometer to preferred
- time (0.5 s 20 min).

or

If you want to use the pulse function (e.g. for a staircase light time switch):

Set potentiometer to position JL. The motion detector is switched on for < 1 s, then off for 9 s. If it detects a movement again, it switches on again for 1 s.



GENERAL INFORMATION

Disposal

Waste electronic equipment must not be disposed of with household waste!

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

Dispose of packaging material in the

recycling bins for cardboard, paper and

x-r T

Warranty

plastic.

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 ST01 is in compliance with Directive 2014/53/EU.

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

Customer service

If the device does not work properly despite proper handling, or in the event of damage, please contact the manufacturer or your retailer.



ELDAT EaS GmbH

Schmiedestraße 2 15745 Wildau Deutschland Telefon: + 49 (0) 33 75 / 90 37-310 Telefax: + 49 (0) 33 75 / 90 37-90 Internet: www.eldat.de E-Mail: info@eldat.de