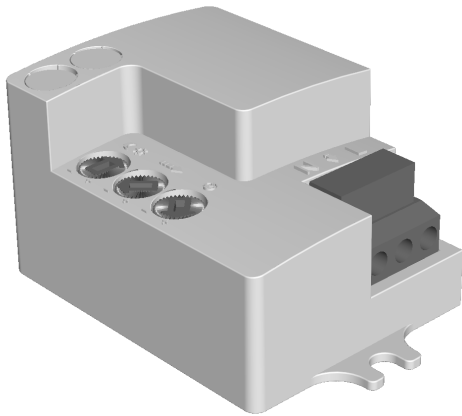


HF SENSOTEC Mini

Sensor module

- For installing in high-quality luminaires
- Light comes ON automatically when it is needed
- Short response time
- Reliable, precision detection
- Functions are set via infrared remote control or 3 potentiometers
- Wide-range voltage input from 100 – 240 VAC 50/60 Hz
- Power consumption when switched off < 300 mW



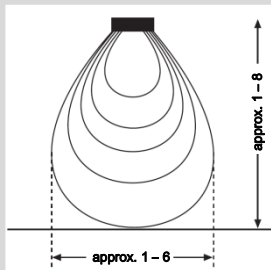
The small one.

With the new HF SENSOTEC Mini sensor module, you, as a lighting manufacturer, can upgrade your products with HF sensor technology. Designed for indoor applications and featuring the latest HF technology from STEINEL, these modules switch light ON and OFF in response to ambient brightness and detected movement.

Capable of detecting movement through glass and thin non-metallic materials, these modules can be installed inside luminaires without a problem. Reach can be adjusted from 1 – 8 m.

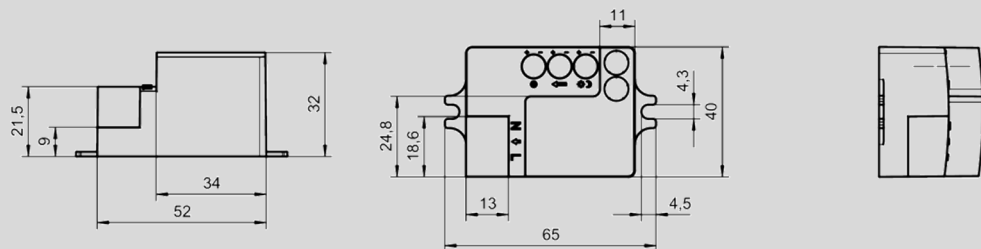


HF SENSOTEC Mini	
Dimensions (W x H x D)	approx. 65 x 40 x 32 mm (Hole spacing: approx. 60 mm)
Voltage supply	100 – 240 V, 50 / 60 Hz Conductors: 1 x 1.5 mm ²
Current consumption	4 – 18 mA
Power consumption when switched off	< 300 mW
Switching capacity	300 W (continuous) max. 10 A (approx. 2 electronic ballasts)
Sensor technology	HF system: 5.8 GHz
Transmitter power	< 1 mW
Reach	approx. 1 – 8 m towards the sensor approx. 1 – 6 m diameter
Configuration	<ul style="list-style-type: none"> ▪ Infrared remote control ▪ 3 potentiometers
Time setting	10 sec – 30 min (60 min with IR)
Light level	2 – 2000 lux
IP rating	IP 20
Temperature range	-20°C – 60°C
Protection class	II
Colour	white
Special features	Burning-in function (100 h) for energy-saving lamps, can be activated via potentiometer or infrared remote control.



Detection zone ideal for detecting movement in front

Mechanical dimensions:



Operating Instructions

Safety precautions

Electrical devices must only be assembled and installed by qualified electricians.

Fire hazard. The maximum permissible load must not be exceeded.

Risk of electric shock. Disconnect before attempting work on the unit or load, take into account all circuit breakers supplying dangerous voltages to the unit or load.

Risk of electric shock. Before installing the sensor, check the enclosure to make sure it is not damaged. Never open the enclosure.

Keep button cell batteries away from children! Immediately seek medical advice if button cell batteries are swallowed.

Explosion hazard. Do not recharge batteries. Do not throw batteries into fire.

The sensor is not suitable for use in burglar alarm systems or other alarm equipment.

Principle

The HF SENSOTEC Mini is an active motion detector that responds to the smallest of movements irrespective of temperature. The integrated HF sensor emits high-frequency electromagnetic waves and receives their echo. In response to the slightest movement in the detection zone, the change in echo is perceived by the sensor. The electronic system switches the connected load on almost instantly in relation to ambient brightness. Detection is possible through non-metallic materials, such as doors, panes of glass or thin walls.

Installation advantages

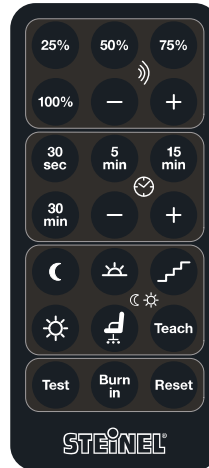
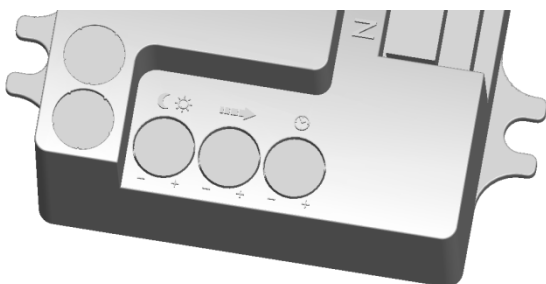
- Screw-mounting tabs on the enclosure for easy installation.
- Connection via a 3-core plug-in terminal
- Compact size

Installation advice

- For indoor use only
- The sensor must project beyond the lamp. The angle of aperture must reach at least 45%
- Pay attention to luminaire materials (interference, reflections, attenuation)
- Connect loads in parallel
- Connected loads must not exceed the specifications at any time.

Function settings

The parameters can be set either via remote control or the integrated setting controls.



Configuration

Twilight setting (response threshold)

The chosen sensor response threshold is infinitely adjustable from approx. 2 lux to 2000 lux. Turning the setting control fully clockwise selects daylight operation at approx. 2000 lux (factory setting). Turning the setting control fully anti-clockwise selects night-time operation at approx. 2 lux. When adjusting the detection zone and performing the walk test in daylight, the setting control must be turned fully clockwise.

Time setting (switch-OFF delay)

The connected luminaire can be set to stay on for any period from approx. 10 sec. to a maximum of 30 min., up to a maximum of 60 min. via remote control. Turning the setting control fully anti-clockwise selects the shortest time of approx. 10 sec. (factory setting). Turning the setting control fully clockwise selects the longest time of approx. 30 min. The switch-off delay is re-started by any movement detected before this time elapses. Every time the light switches off, it takes approx. 2 seconds for the sensor to start detecting movement again. The sensor is only able to detect movement again once this time has elapsed.

Reach setting (sensitivity)

The sensor's reach setting can be infinitely varied. Turning the setting control fully anti-clockwise selects minimum reach. Turning the setting control fully clockwise selects maximum reach. The reach may vary depending on room conditions.

Note

As attenuation and reflections can cause a high-frequency sensor to behave differently in any luminaire, we cannot accept any liability for the sensor not working as expected in the particular luminaire it is being used in. However, we are able to provide accreditation. Please contact our OEM Sales Manager. The customer must also guarantee and take responsibility for the way in which the other components behave in the luminaire (lamp, ballast etc.).

Burn-in function for lamps

Manufacturers recommend burning in various fluorescent lamps for 100 hours to increase their useful life. This burning-in process can be performed as follows:

1. The burning-in process can be started via the potentiometers. Turn all 3 potentiometers fully clockwise, then turn the right-hand setting control (time) fully anti-clockwise and then fully clockwise again (within 10 sec.)
2. The burning-in process is confirmed by switching the light OFF and back ON again twice.
3. The light is now left ON for 100 hours without sensor function. Do not disconnect the light from the mains power supply during this period.
4. The luminaire automatically returns to sensor mode after 100 hours.

Alternatively, the burning-in process can be activated via infrared remote control.

Test mode

The test mode has the purpose of optimising the detection zone when putting the luminaire into operation. In this mode, the stay-ON time is 5 seconds and the light level is ignored.

The test mode can be activated via the infrared remote control. Alternatively, the test mode can also be activated via the potentiometers by starting the burning-in process first and then adjusting the potentiometer for reach. The test mode is exited automatically 2 minutes after it is activated and the sensor switches to automatic mode.

Table 1: Function buttons on IR remote control

Button	Function
25%	Setting the detection zone
50%	
75%	
100%	
+	Precision setting of the detection zone +5%
-	Precision setting of the detection zone -5%
30 sec	Setting the stay-ON time
5 min	
15 min	
30 min	
+	Increases the stay-ON time by 10 s to 1 min, then in 1 min increments to a maximum of 60 min
-	Shortens the stay-ON time by 1 min down to 1 min, then by 10 s down to a minimum of 10 s.






	Light-level threshold, night
	Light-level threshold, twilight
	Light-level threshold, stairwell
	Light-level threshold, office
	Operation irrespective of light level
Teach	Current light level is saved as the brightness threshold (to do this, the lamp must be switched OFF)
Reset	Resets all parameters to potentiometer configuration
Burn in	Burn-in function 100 h
Test	Unit switched to test mode for 2 min: stay-ON time approx. 5 s, daylight mode.

Table 2: LED indicator

Red LED	Function
Flashes 1x	Parameters applied
Flashes 2x	Test mode activated
Flashes 3x	Resets parameters to potentiometer configuration
Flashes 4x	Burn-in function activated for 100 hrs

This product data sheet provides no guarantee of qualities within the meaning of the statutory warranty provisions for the product described.



Electronic control device with double insulation in compliance with DIN EN 61347