B.E.G. LUXOMAT®

The HF series – the new generation of (HF) microwave detectors

HF microwave occupancy detectors

HF microwave occupancy detectors can function through many materials such as wood, partition walls and glass, and therefore they can be installed "hidden" in lights or flush-mounted.

In order to enable daylight-dependent lighting control, B.E.G. has fitted the new HF-MD3 and HF-MD4 microwave detectors with light sensors.

The external light sensors (optional on the HF-MD3) can be perfectly positioned (e.g. above the workstation, where light is most needed), while the power unit can be positioned near the lights for example. As well as an external light sensor, the HF-MD4 also has an external HF microwave sensor, which can for example be placed invisibly in the switch box next to the door.

But the use of HF microwave technology can also be useful in conventional ceiling-mounted occupancy detectors. The advantages over the commonly-used passive infrared devices are especially apparent in corridor areas, as the HF sensor is particularly sensitive to frontal movements. B.E.G. has developed the HF-MD6-C occupancy detector especially for this purpose. It uses two HF microwave modules, each monitoring half the corridor, thus ensuring optimum motion detection. All the necessary settings can be made conveniently from ground level using the smartphone app.

The new range is completed by the HF-MD5 ceiling-mounted occupancy detector. This is particularly suitable for instances where the positioning of the sensor does not allow a direct line of sight due to beams, dividing walls or changes in level.

Sample applications

In the high ambient temperatures of kitchens and swimming pools, HF detectors perform better than PIR-based detectors.

HF detectors also have their advantages in cold rooms and data centres. In cold rooms, people are often so well insulated that there is not enough of a heat source for detection.

HF detectors can be integrated into lights without affecting their protection rating. An ideal solution for applications demanding IP65 and higher.

HF detectors can be installed almost invisibly, thus offering good protection against vandalism.
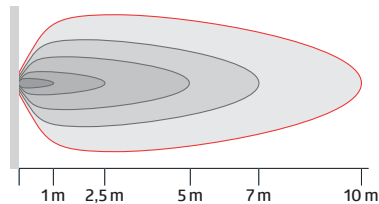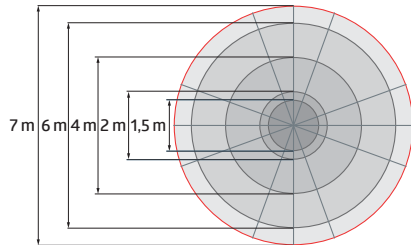
Brightness-dependent lighting regulation even with flush mounting

HF-MD3

- Light sensor integrated into case
- Setup via potentiometer on device
- External light sensor sold separately
- With optional light sensor, also remote controll-capable using the B.E.G. smartphone app

Technical Data

- Voltage: 110-240 V AC, 50/60 Hz
- Detection area: 360°
- Degree/ class of protection: IP20 / II
- Ambient temperature: -15°C – +50°C
- Dimensions: 121 x 40 x 26 mm
- Switching capacity: 2300 W, cos phi = 1

7 m 6 m 4 m 2 m 1,5 m

1 m 2,5 m 5 m 7 m 10 m

HF-MD4

- Optimum and individual alignment using external light sensor and external HF microwave sensor

- Fast connection of power element with light sensor and microwave sensor using plug contacts

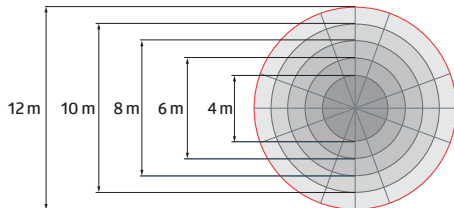- Convenient programming using the B.E.G. smartphone app

Technical Data

- Voltage: 110-240 V AC, 50/60 Hz

- Detection area: 360°

- Recommended mounting height: 2.5 m

- Degree/class of protection: IP20 / II

- Ambient temperature: -15°C – +50°C

- Dimensions: 121 x 40 x 60 mm

- Switching capacity: 2300 W, cos phi = 1

Microwave (HF) occupancy detectors for small rooms

HF-MD5

- Round detection area
- Detection range adjustable in five steps
- Available for installation in suspended ceilings and for surface mounting
- Settings via App
- Factory settings 500 Lux, 10 min.

Technical Data

- Voltage: 110 -230 V AC, 50/60 Hz
- Range: Ø 12 m
- Recommended mounting height: 2.5 m
- Degree/ class of protection: IP20 / II
- Switch-on threshold: 10 - 2000 Lux
- Ambient temperature: -15°C – +50°C
- Switching capacity: 2300 W, cos phi = 1

12 m   10 m   8 m   6 m   4 m

Microwave (HF) occupancy detectors with 2 HF sensors for corridors
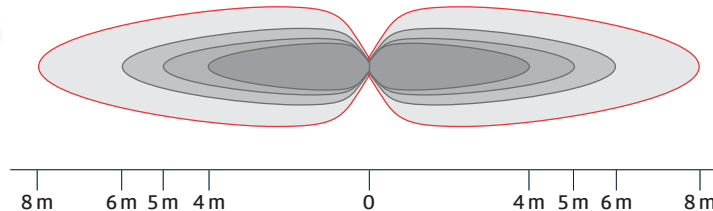
HF-MD6-C

- Oval detection area
- Detection range adjustable in five steps
- Available for installation in suspended ceilings and for surface mounting
- Settings via App
- Factory settings 500 Lux, 10 min.

Technical Data

- Voltage: 110 -230 V AC, 50/60 Hz
- Range: Ø 20 m
- Recommended mounting height: 2.5 m
- Degree/ class of protection: IP20 / II
- Switch-on threshold: 10 - 2000 Lux
- Ambient temperature: -15°C – +50°C
- Switching capacity: 2300 W, cos phi = 1

| 8 m | 6 m | 5 m | 4 m | 0 | 4 m | 5 m | 6 m | 8 m |

Active occupancy
detection

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