

Motion Detector  
UP 255 LCP3000EZ  
Data Sheet



# product GUIDE

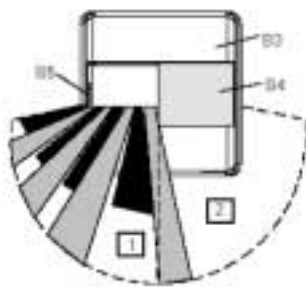


**SIEMENS**

Global network of innovation

## Motion Detector UP 255

**5WG1 255-2AB11**



Using the detachable masking plate supplied (B4), it is possible to reduce the detection range on the left or right.

- 1 Detection range
- 2 Screened range
- B3 Motion detector
- B4 Detachable masking plate
- B5 Slot for detaching the masking plate

### Product Description

The motion detector UP 255 is a proximity sensor which reacts to movements of people, animals or other moving objects. If a motion is detected, the corresponding telegrams are sent on the bus. It is used, for example, to detect people moving in its monitoring area. Using an appropriate application program, it gives switching commands via the flush-mounted bus coupling unit to actuators, such as binary outputs, to switch groups of luminaries

or to signaling units. It must be installed on the flush-mounted bus coupling unit (UP 114). It is only operational when used together with the bus coupling unit and the corresponding application program, i.e. the motion detector UP 255, with flush-mounted bus coupling unit (UP 114) consists of the device (hardware) and the application program (software). The device is for permanent interior installations, in dry rooms.

### Technical Specifications

#### POWER SUPPLY

Via the bus coupling unit

#### OPERATING ELEMENTS

Potentiometer for stepless adjustment of the range between 100% and 20%.

#### PROPERTIES

- Light sensor: adjustable in steps from 0.9 to 93 foot candles (1 to 1000 lux) (daylight mode to night mode)
- Horizontal detection angle: 180 degrees on two levels (can be reduced to 90° on the left or right using a detachable masking plate)
- Lateral range: approx. 20 ft (6 m) each side
- Optical system: Fresnel lens (2 levels with 18 segments)

#### CONNECTIONS

10-pole plug connector (PEI): for connection to the bus coupling unit

#### PHYSICAL SPECIFICATIONS

Housing: plastic  
Dimensions (L x W x D): 65 x 65 x 30 mm (2.56" x 2.56" x 1.18")  
Weight: approx. 45 g (0.095 lb)  
Fire load: approx. 750 kJ ± 10 %  
Mounting: clipped onto bus coupling unit  
Mounting height: 3.6 to 7.2 ft (1.10 m to 2.20 m)

#### RELIABILITY

Reliability: 99.90% based on 1,000,000 units/10 years of operation under load

#### ELECTROMAGNETIC COMPATIBILITY

Complies with Part 15 of the FCC rules pursuant to the limits for a Class A digital device.

#### ENVIRONMENTAL SPECIFICATIONS

- Ambient temperature operating: 23°F – 113°F (-5 +45°C)
- Ambient temperature non-op.: -13°F – 158°F (-25...+70°C)
- Relative humidity (non-condensing): 5% to 93%

#### LISTINGS AND CERTIFICATIONS

EIB certified  
CE mark  
Complies with EMC regulations (residential and nonresidential buildings), and low voltage regulations

## Installation Instructions

### Mounting note

The installation site and type of installation should be carefully selected according to the area that is to be monitored while considering any possible interference. The mounting wall should not be exposed to vibration or motion, as any movement of the motion detector has the same effect as thermal movement in the detection area. In order, to prevent unwanted switching operations, the motion detector should, if possible, be installed so that it is not exposed to direct sunlight. Air turbulence caused by heaters, vents from air-conditioning units, dropping leaves of flowers, etc., can also trigger switching operations in the monitoring area of the motion detector. Since infrared radiation is largely absorbed or reflected by glass, plastic, brickwork, metal and cardboard, it is not picked up by the motion detector. Depending on the lamp type, fluorescent lamps and incandescent lamps may not be placed less than 1-2 m away from the

motion detector in the detection area. Otherwise, the motion detector may be switched on again due to the thermal variation in the sensor range generated when the lamp is switched off.

- The optimum range is achieved if the sensor is mounted sideways to the direction of movement. There could otherwise be a reduction in the range.
- Sources of interference (lamps, heating systems etc.) should be excluded from the detection area (e.g. using the detachable masking plate).
- Sensors should not be aligned towards the sun. The high level of thermal energy can destroy the sensors.

- In the event of voltage recovery and after each programming process, it is necessary to wait for an immunity period of approx. 80 seconds before the motion detector is ready for operation again. No telegrams are sent by the motion detector during this time.

### General description

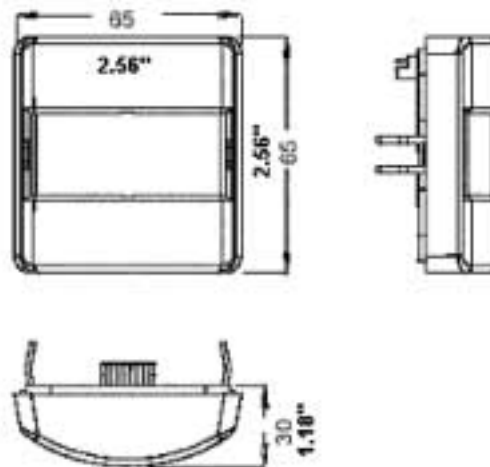
The motion detector is placed on the flush-mounted bus coupling unit together in a frame.

Representation of the detection ranges

Mounting height type	Spatial view	Top view	Side view
1,10m (3,60 ft)			
2,20m (7,21 ft)			
Type 2,20 (7,21 ft) Mounting height 1,10 (3,60 ft)			

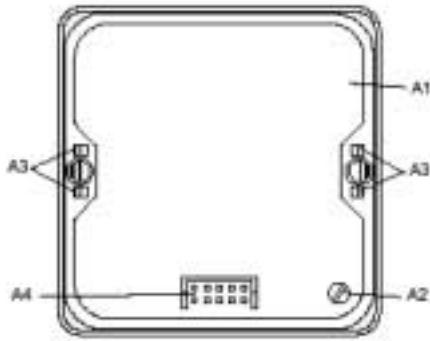
### Dimensions Diagram

Dimensions in mm and inches

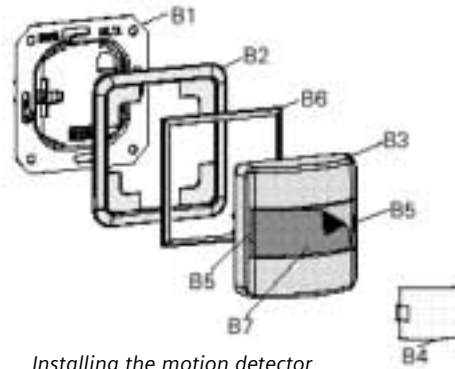


# Motion Detector UP 255

SWG1 255-2AB11



Motion detector rear view



Installing the motion detector

- B1 Flush-mounted bus coupling unit
- A1 Frame
- B2 Motion detector
- B3 Detachable masking plate
- B4 Slot for detaching the masking plate
- B5 Tier frame
- B6 Adhesive protection tape

## Location and function of the operating and display elements

- A1 Motion detector UP 255
- A2 Potentiometer for setting the range (left limit stop 20%, right limit stop 100%)
- A3 Mounting springs
- A4 10-pole plug connector (PEI)

## Mounting sequence

- The flush-mounted bus coupling unit is connected and fixed in position in the flush-type box (see installation instructions for the flush-mounted bus coupling unit).
- The adhesive protection tape (B7) must be removed from the receiving lenses of the motion detector (B3).
- If required, the uninstalled detachable masking plate (B4) is inserted on the left or right of the motion detector and induced to click into place by a strong pressure onto the 4 mounting clamps.

- It must not be forgotten to adjust the potentiometer for setting the range (A2).
- Place the motion detector (B3) with the relevant frame (B2) on the flush-mounted bus coupler (B1).
- The brightness limit is set in the application program.
- It is possible to check the function of the detector or the detection area after programming by carrying out a walk test (according to detection ranges diagram). Before this, the setting "maximum" has to be selected for the brightness and the setting "minimum" has to be selected for the switching interval in the parameter list.

## Dismantling

The motion detector (B3), together with the frame, is manually removed from the flush-mounted bus coupling unit (B1). If a modification of the viewing area is required, the detachable masking plate can be removed with a screwdriver by applying leverage as marked on the side of the device (B5). (The screwdriver should not be positioned near the Fresnel lens).

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