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CP Electronics EBMHS-DNET1 Network Miniature Ceiling Mounted PIR Presence Detector User Guide

Contents

CP Electronics EBMHS-DNET1 Network Miniature Ceiling Mounted PIR Presence Detector

Product Information

The EBMHS-DNET1 and EBMHS-IP-DNET1 are miniature integration presence detectors designed to be part of a DALI network. The EBMHS-DNET1 combines a passive infrared (PIR) motion sensor and photocell, functioning as a presence detector and returning occupancy data to the DALI network. The photocell provides a lux level measurement value to the DALI network. The EBMHS-IP-DNET1 is supplied with two 1m wires to connect to the DALI network and is designed to operate correctly with reversed polarity.

The detectors feature a PIR lens for detecting movement within the unit's detection range, an IR receiver for receiving control and programming commands from an infrared handset, a light level sensor for measuring the overall light level in the detection area, and status LEDs that indicate various conditions. The EBMHS-DNET1 has a detection range of up to 14m in diameter at a height of 9m, while the EBMHS-IP-DNET1 has a detection range of up to 7m in diameter at a height of 9m. The detection range decreases as the sensor is installed lower, subject to the parameters shown on the detection diagram.

The detectors can be surface mounted using the lugs on the rear of the detector or flush mounted using the flush mount ring. For surface mounting, the detector is secured into thin sheet metal using the lugs or by creating a cut-out. For flush mounting, a 32mm diameter hole is required in a material that is not thicker than 6mm. If the material is thicker than 6mm, the bottom of the retention arms needs to be removed with side cutters. The EBMHS-DNET1 has an IP40 rating, while the EBMHS-IP-DNET1 has a higher IP65 rating. The detectors are made of flame retardant ABS and PC/ABS materials and comply with EMC-2014/30/EU and LVD 2014/35/EU regulations.

For further compliance information, visit **www.cpelectronics.co.uk/compliance**.

Product Usage Instructions

1. **Choosing a Suitable Location:**
   - The detector should be sited so that the occupants of the room fall inside the detection pattern shown on page 1, at a recommended ceiling height of 2.8m.
   - Note that the lower the sensor is installed, the smaller the detection range will be, subject to the parameters shown on the detection diagram.
2. **Surface Mounting:**
   - Use the lugs on the rear of the detector to secure it into thin sheet metal (1mm max.) or create a cut-out in thin sheet metal (1mm max.).

3. **Flush Mounting:**
   - If flush mounting in a material that is greater than 6mm thick, remove the bottom of the retention arms with side cutters.
   - A 32mm diameter hole will be required to mount the flush mount ring.
4. **Wiring (EBMHS-IP-DNET1):**
   - The EBMHS-IP-DNET1 is supplied with two 1m wires to connect to the DALI network.
   - The device is designed to operate correctly with reversed polarity.

IMPORTANT NOTICE! This device should be installed by a qualified electrician in accordance with the latestedition of the IEE Wiring Regulations and any applicable Building Regulations.

Miniature Integration Presence Detector DALI network

The EBMHS-DNET1 is a combined passive infrared (PIR) motion sensor and photocell designed to be part of a DALI network. Functioning as a presence detector, the unit returns occupancy data to the DALI network. The photocell provides a lux level measurement value to the DALI network. A selection of fixing clips to allow the unit to me mounted in or to the side of a luminaire are available. For a copy of the DALI 'Command set', contact CP Electronics' technical support.

Features

Sensor head

PIR lens
which covers...

IR Receiver
Light Level Sensor
Status LED
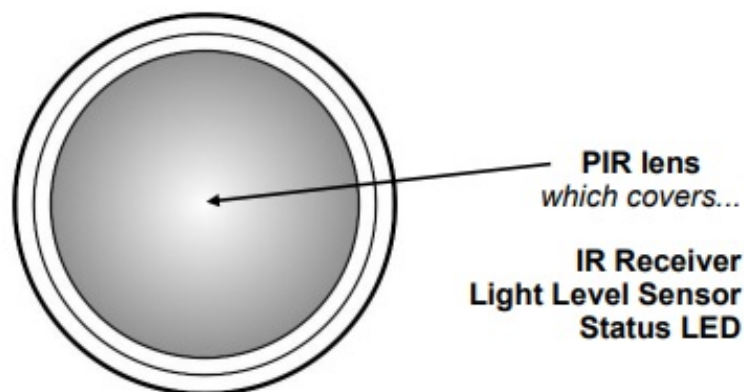
PIR Sensor
Detects movement within the unit's detection range, allowing load control in response to changes in occupancy.
IR Receiver
Receives control and programming commands from an IR (infrared) handset.
Light Level Sensor
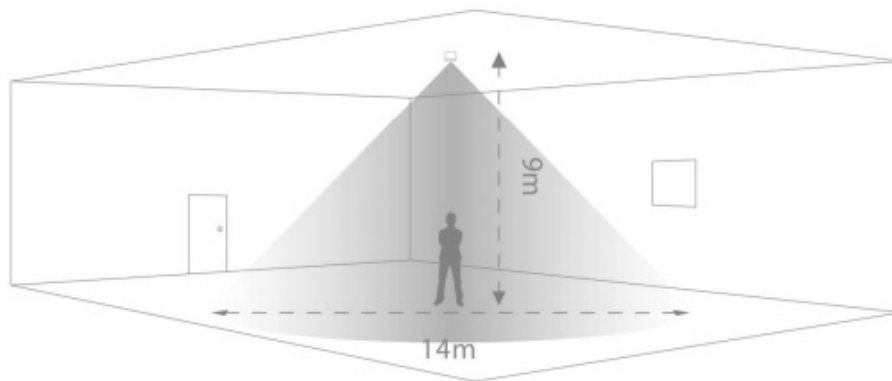Measures the overall light level in the detection area
Status LEDs
The LED flashes Red to indicate the following:

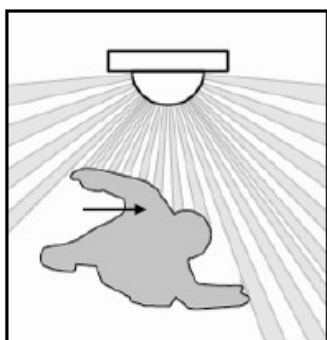| Walk Test LED active	when movement is detected
Valid setting received	

Detection diagram

Range

high < sensitivity > low

Note: illustration shows an average of the walk across

Walk across

Height	Range Diameter
9m	14m
7m	13m
5m	11m
3m	8m

Walk towards
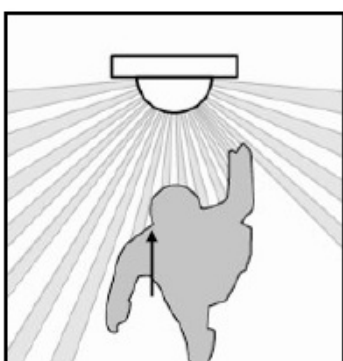
Height	Range Diameter
9m	7m
7m	7m
5m	7m
3m	5m

## Installation EBMHS-DNET1

Choosing a Suitable Location
The detector should be sited so that the occupants of the room fall inside the detection pattern shown on page 1, at a recommended ceiling height of 2.8m. Note that the lower the sensor is installed the smaller the detection range will be, subject to the parameters shown on the detection diagram.

- Avoid direct sunlight entering the sensor.
- Do not site within 1m of forced air heating or ventilation.
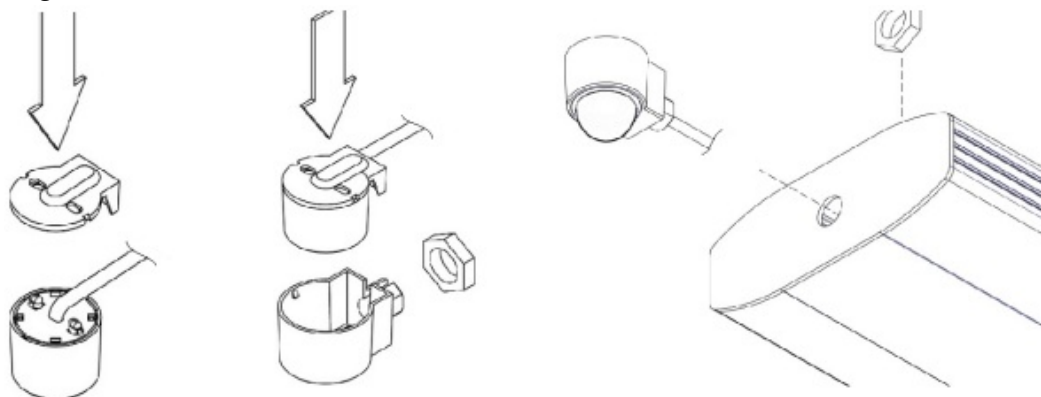- Do not fix to a vibrating surface.

- Do not exceed maximum length of cable (200m) on data bus.
- Do not exceed maximum bus loading (200mA).

Surface mounting

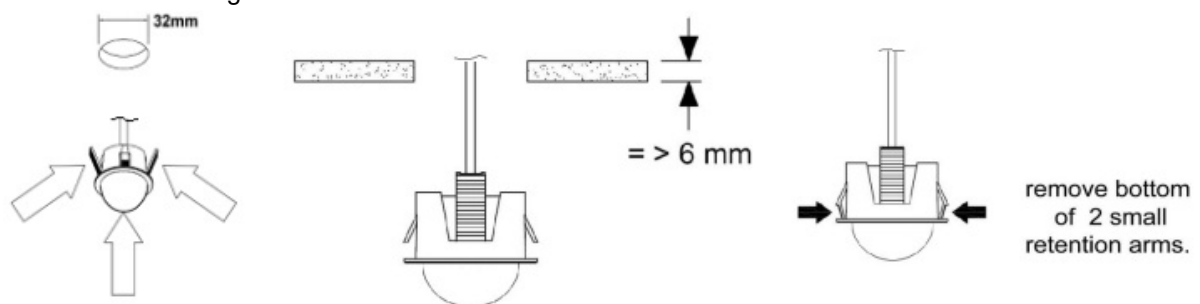Use the lugs on rear of detector to secure into thin sheet metal (1mm max.).

Ø23mm

Ø3.5m

Create cut-out into thin sheet metal (1mm max.).
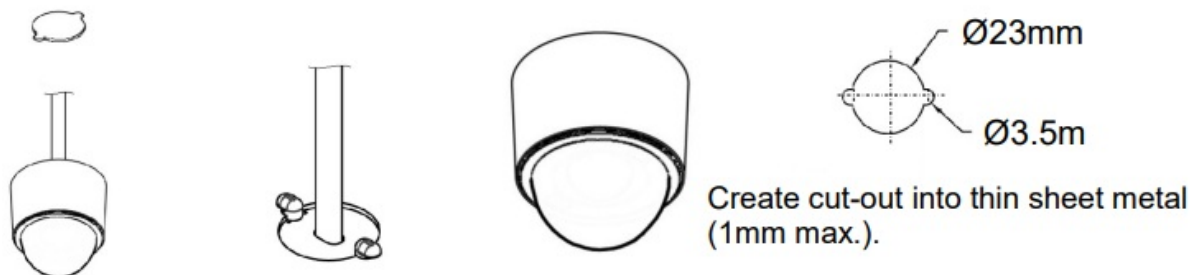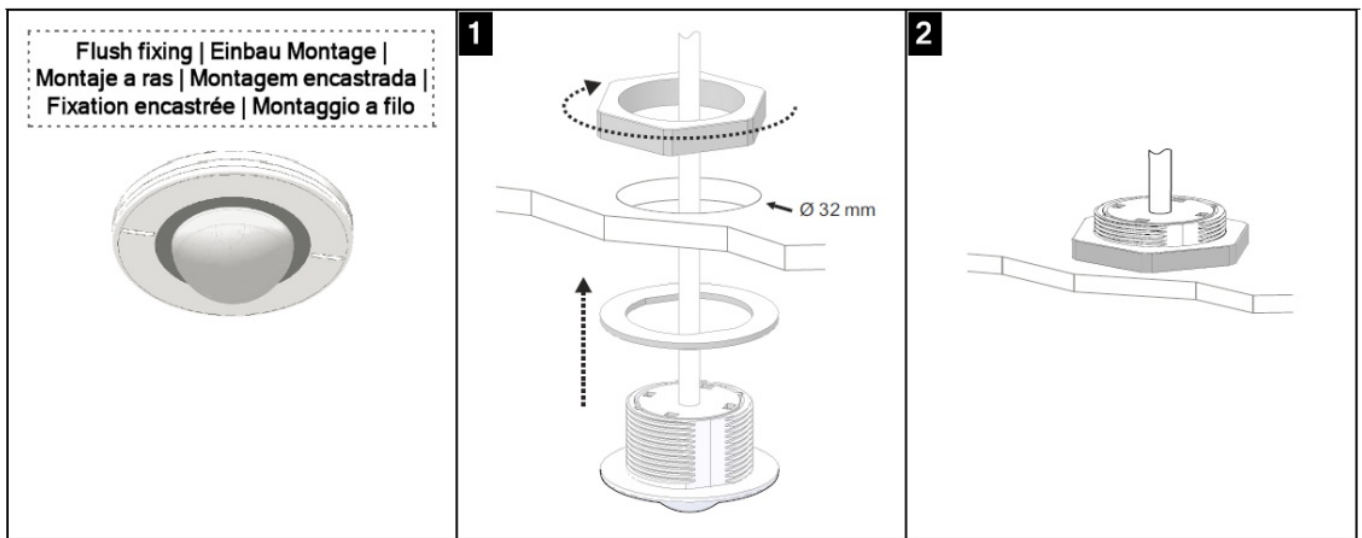
Side mounting

Flush mounting

The product can be mounted using the flush mount ring as shown. If flush mounting in a material that is greater than 6mm thick, remove bottom of retention arms with side cutters. A 32mm diameter hole will be required to mount the flush mount ring.

32mm

= > 6 mm

remove bottom of 2 small retention arms.

Installation EBMHS-IP-DNET1

Flush fixing | Einbau Montage | Montaje a ras | Montagem encastrada | Fixation encastrée | Montaggio a filo

Ø 32 mm

The EBMHS-DNET1 supplied with two 1m wires to connect to the DALI network. The device is designed to operate correctly with reversed polarity.


DALI DA
      DA
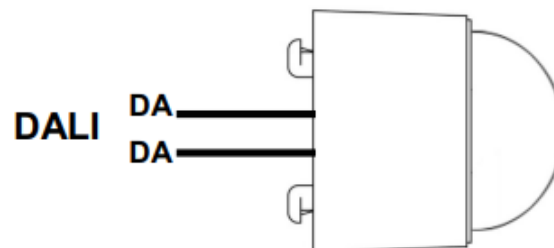
Technical data

- **Dimensions:** See diagrams opposite
- **Weight:** 0.10kg
- **Supply Voltage:** 9.5VDC—22.5VDC via DALI
- **Supply Current:** 8mA
- **Temperature:** -10ºC to 35ºC
- **Humidity:** 5 to 95% non-condensing
- **Material:** (casing) Flame retardant ABS and PC/ABS
- **Type Class:** 2
- **IP rating:** EBMHS-DNET1 IP40 EBMHS-IP-DNET1 P65 (BS EN 60598)
- **Compliance:** EMC-2014/30/EU
    - LVD-2014/35/EU
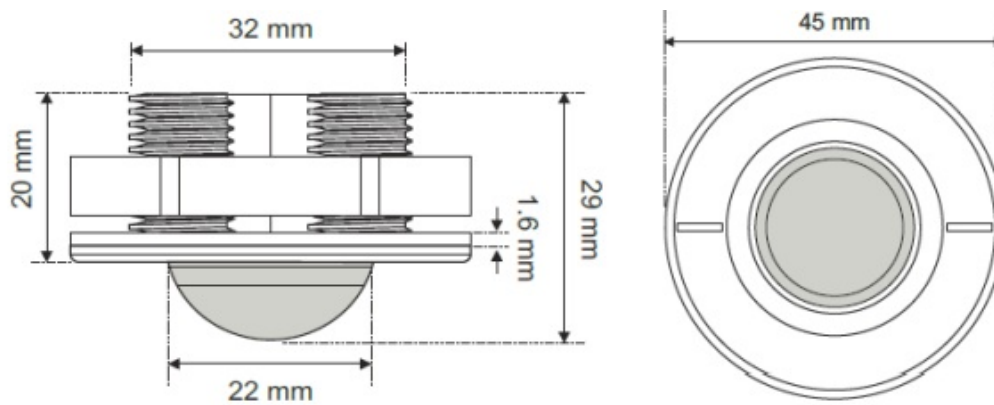   - For further compliance information visit **www.cpelectronics.co.uk/compliance**
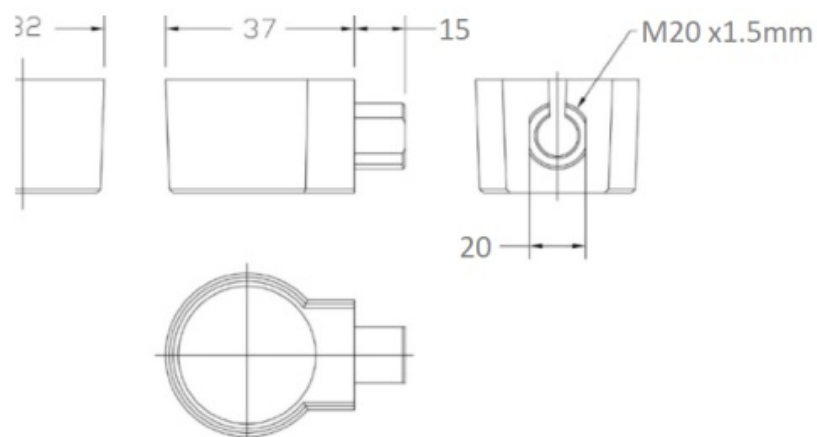
EBMPIR-FRW
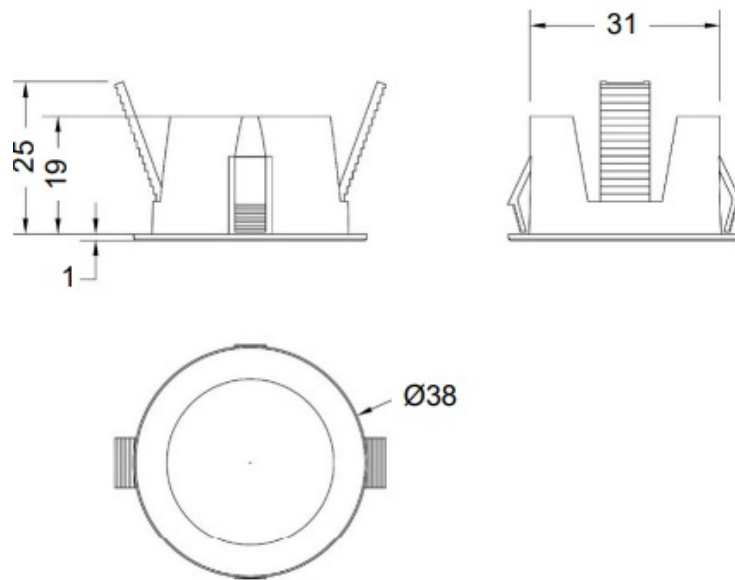
EBMHS-DNET1
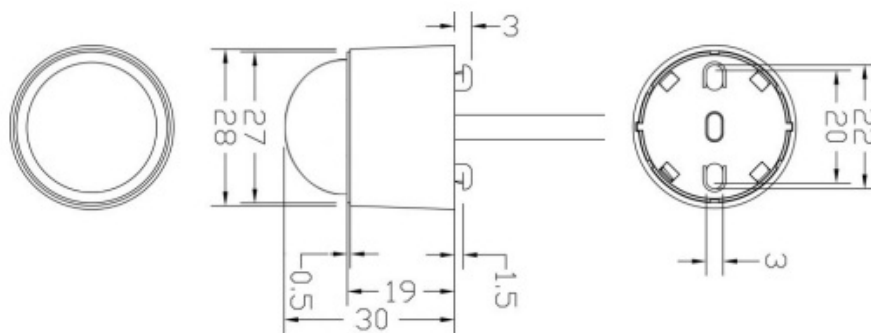
EBMHS-IP-DNET1

EBMPIR-ECW

Part numbers

Detector/Brackets

Part number/Description

- EBMHS-DNET1 Miniature integration presence detector
- EBMHS-IP-DNET1 Miniature integration presence detector IP
- EBMPIR-ECW Mini PIR head end cap – white
- EBMPIR-FRW Mini PIR head flush ring – white

IMPORTANT NOTICE!

This device should be installed by a qualified electrician in accordance with the latest edition of the IEE Wiring Regulations and any applicable Building Regulations.

Due to our policy of continual product improvement CP Electronics reserves the right to alter the specification of this product without prior notice.

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Documents / Resources

	CP Electronics EBMHS-DNET1 Network Miniature Ceiling Mounted PIR Presence Detector [pdf] User Guide EBMHS-DNET1, EBMHS-IP-DNET1, EBMHS-DNET1 Network Miniature Ceiling Mounted PIR Presence Detector, Network Miniature Ceiling Mounted PIR Presence Detector, Miniature Ceiling Mounted PIR Presence Detector, Ceiling Mounted PIR Presence Detector, Mounted PIR Presence Detector, PIR Presence Detector, Presence Detector, Detector

References

- **CP Electronics | Brands | Legrand United Kingdom**
- **Home | Legrand**