Installation and Instruction Manual

HYTRONIK®

DALI 2 **PIR Motion Sensor**   **HIR23/D2/UH**

1. Technical Specifications

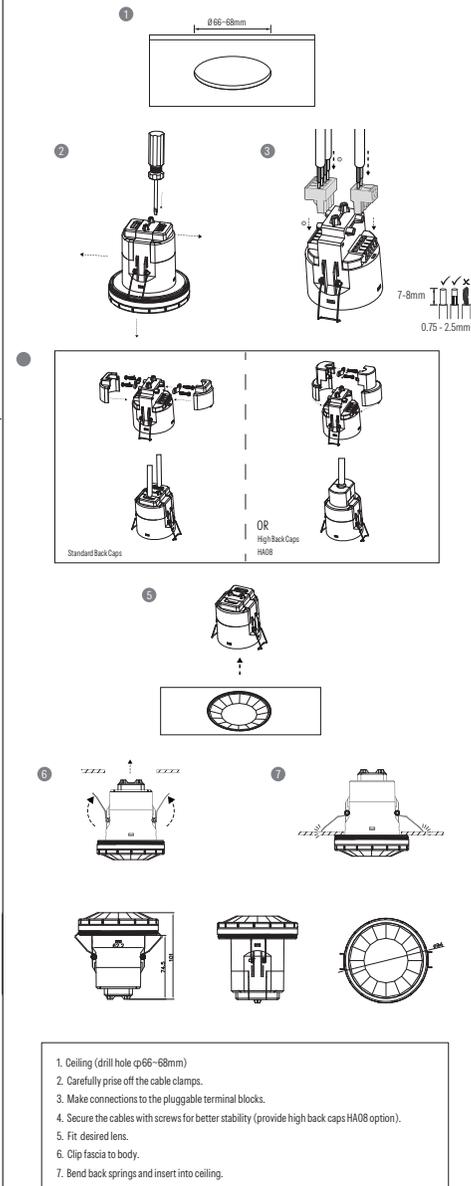| Sensor Model	PIR detection
HIR23/D2/UH	Installation Height : 21m
	Detection Range(Ø) :28m
Detection angle	360°
Lux reading range	< 1000 lux
Operating voltage	9.5~22.5VDC
Consumption DALI BUS current	Max. 10 mA (no LED)
	Max. 12 mA (with LED)
Identify device	Red LED flashes 15s
Warming-up	5s
Operation temperature	Ta: -20℃ ~ +50℃
IP rating	IP 20 / IP 54

2. Installation

Wire Preparation

0.75 - 2.5mm

7-8mm

Pluggable screw terminal. It is recommended to make connections to the terminal before fitting to the sensor.
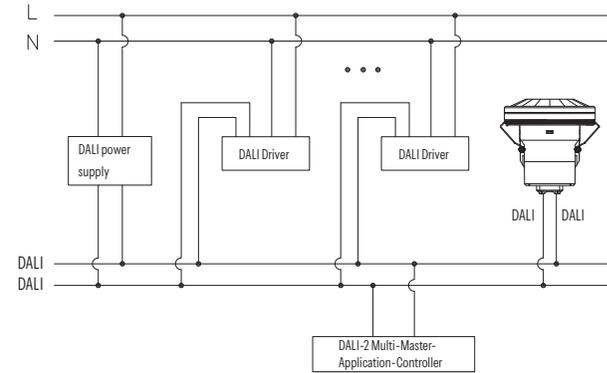
1. 200 metres (total) max. for 1mm² CSA (Ta = 50 ℃)
2. 300 metres (total) max. for 1.5mm² CSA (Ta = 50 ℃)

Mechanical Structure & Dimensions

Ø 66~68mm

7-8mm
0.75 - 2.5mm²

Standard Back Caps   OR High Back Caps HA08

1. Ceiling (drill hole φ66~68mm)
2. Carefully prise off the cable clamps.
3. Make connections to the pluggable terminal blocks.
4. Secure the cables with screws for better stability (provide high back caps HA08 option).
5. Fit desired lens.
6. Clip fascia to body.
7. Bend back springs and insert into ceiling.

Wiring Diagram

L
N
DALI
DALI

DALI power supply   DALI Driver   DALI Driver   DALI   DALI

DALI-2 Multi-Master-Application-Controller

————**This product should be installed by a qualified electrician.**

Note: HIR23/D2/W has been used as DALI-2 input device to only report DALI instance (light sensor instance and motion sensor instance) to DALI-2 application controller, who is the "main brain" to process the data communication between input devices and the control gear and assign different function.
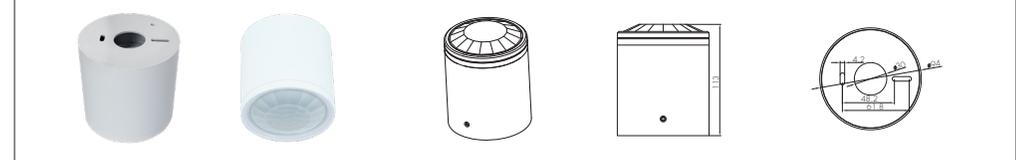
3. Detection Pattern & Optional Accessories

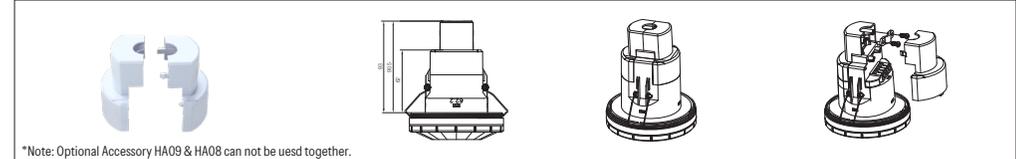| HIR23/D2/UH (Ultra High-bay)		
HIR23/D2/UH: Ultra High-bay convex lens detection pattern for single person @ Ta = 20℃ (Recommended ceiling mount installation height 3m-21m)		
Noted: The different humidity levels in the environment can affect the sensor detection range.		
Mount height	Tangential (A)	Radial (B)
3m	max12.5m2 (Ø = 4m)	max12.5m2 (Ø = 4m)
6m	max50m2 (Ø = 8m)	max28m2 (Ø = 6m)
9m	max113m2 (Ø = 12m)	max50m2 (Ø = 8m)
12m	max201m2 (Ø = 16m)	max79m2 (Ø = 10m)
15m	max314m2 (Ø = 20m)	max113m2 (Ø = 12m)
18m	max452m2 (Ø = 24m)	max113m2 (Ø = 12m)
21m	max615m2 (Ø = 28m)	max113m2 (Ø = 12m)

A: Tangential movement   B: Radial movement

h = max.21m   h = max.21m

insensitive sensitive   insensitive sensitive

Optional Accessory --- Ceiling/Surface Metal Mount Box: HA09/W, HA09/B, HA09/G

Optional Accessory --- HA08

*Note: Optional Accessory HA09 & HA08 can not be uesd together.

4. Additional Information / Documents

1. Regarding precautions for PIR Sensors installation and operation, please kindly refer to www.hytronik.com/download →knowledge →PIR Sensors - Precautions for Product Installation and Operation

2. Data sheet is subject to change without notice. Please always refer to the most recent release on www.hytronik.com/products/Motion Sensors →Stand-alone Sensors

3. Regarding Hytronik standard guarantee policy, please refer to www.hytronik.com/download →knowledge →Hytronik Standard Guarantee Policy

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