

HIR61

PIR Lowbay | DALI-2 D4i | Zhaga Book 20 Standard



Benefits

Compact: Super small size Zhaga Book 20 sensor

DALI-2 feature: Occupancy (part 303) Daylight (part 304)

Standardized: DALI-2 protocol certified as D4i Type B

Applications

For linear luminaires up to 3m height

Office / Meeting rooms

Schools / Classroom

Check Out the Complete System Solution on the Website:
<https://www.hytronik.com/product/HIR61>



LVD

Product Description

HIR61 is a compact DALI-2 PIR motion sensor designed in compliance with the Zhaga Book 20 standard, enabling easy and standardized integration with compatible luminaires. It integrates a DALI-2 module, PIR motion sensor, and daylight sensor to provide reliable sensing input for smart lighting control. The ultra-compact design allows seamless luminaire integration while maintaining a clean and flexible fixture design.

Functions and Features

See additional details at the end of datasheet



D4i Certified



DALI-2 Certified



Zhaga Book 20
Standard

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Specifications

Main Capabilities

Dimming (Output) Interface	DALI/DALI-2
Connector Type	Zhaga book 20

Sensor Data

Detection angle	360°
Lux range	<1000 lux
Max. Detection range (Diameter)	12.0 m
Maximum Mounting Height	3.0 m
Detection area	113 m ²

Electrical Data

Operating voltage range	9.5-22.5 VDC
In-rush current	20.0 mA
Current Consumption	Max. 8 mA (no LED)

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Specifications

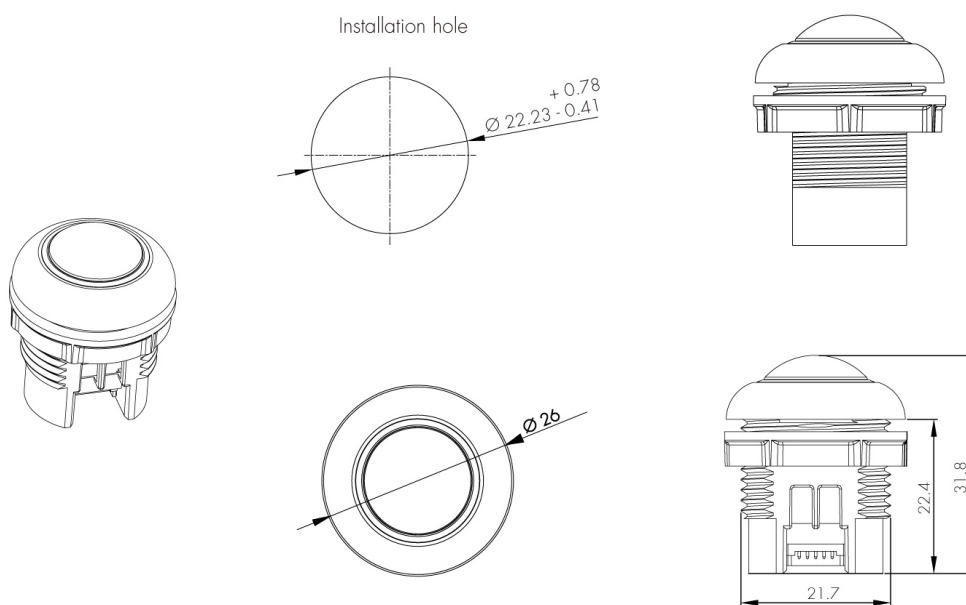
Technical	
Product weight	20.0 g
Product height	31.8 mm
Product length	26.0 mm
Product width	21.7 mm
Mounting hole	22.23 mm
Ambient temperature	-20 ~ +50 °C
Storage temperature	-40 ~ +70 °C
Humidity max	10 ~ 90%
IP Rate	IP20

Standard	
EMC	EN 61547, EN IEC 55015
LVD	EN 61347-1, EN 61347-2-11, EN 62493

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Technical Drawing



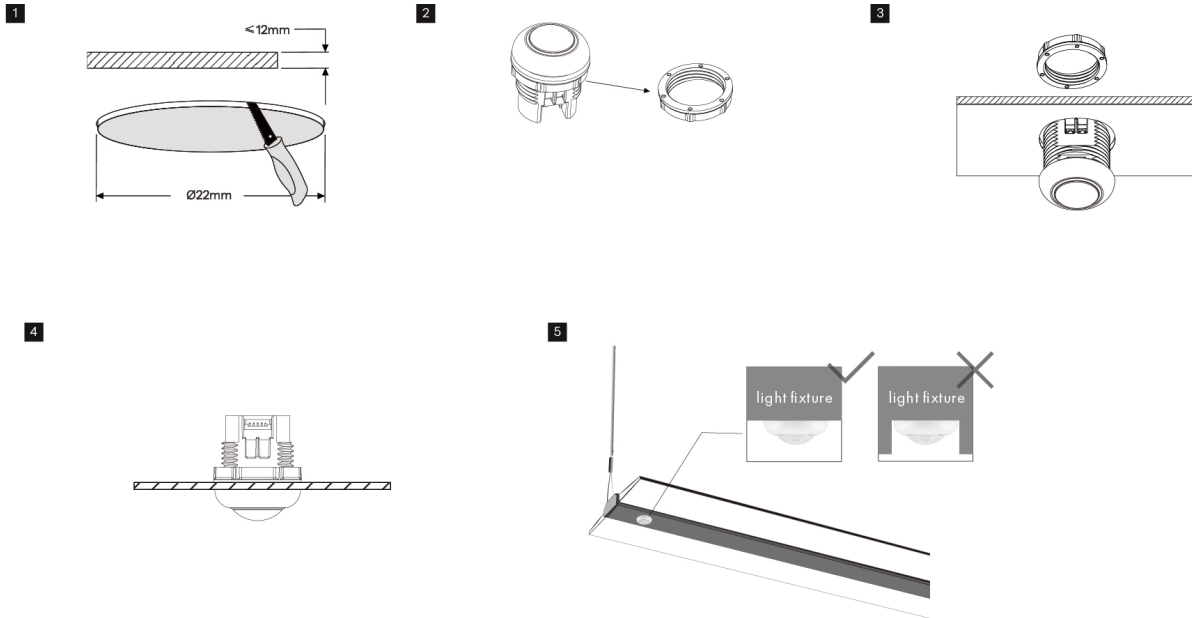
Application Example



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Installation Process

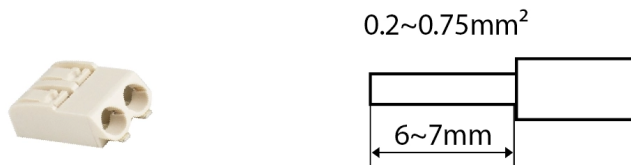


Detailed Installation Instructions

1. Make a hole with a diameter of $\varnothing 22\text{mm}$ at a suitable place of the light.
2. Remove the plastic nut of the sensor head by turning it.
3. Pass the sensor head and the cable through the hole. Secure the sensor in the light with the plastic nut.
4. Connect the RJ12 cable to the control unit.
5. To ensure better detection, install the sensor head outside the surface of the light.

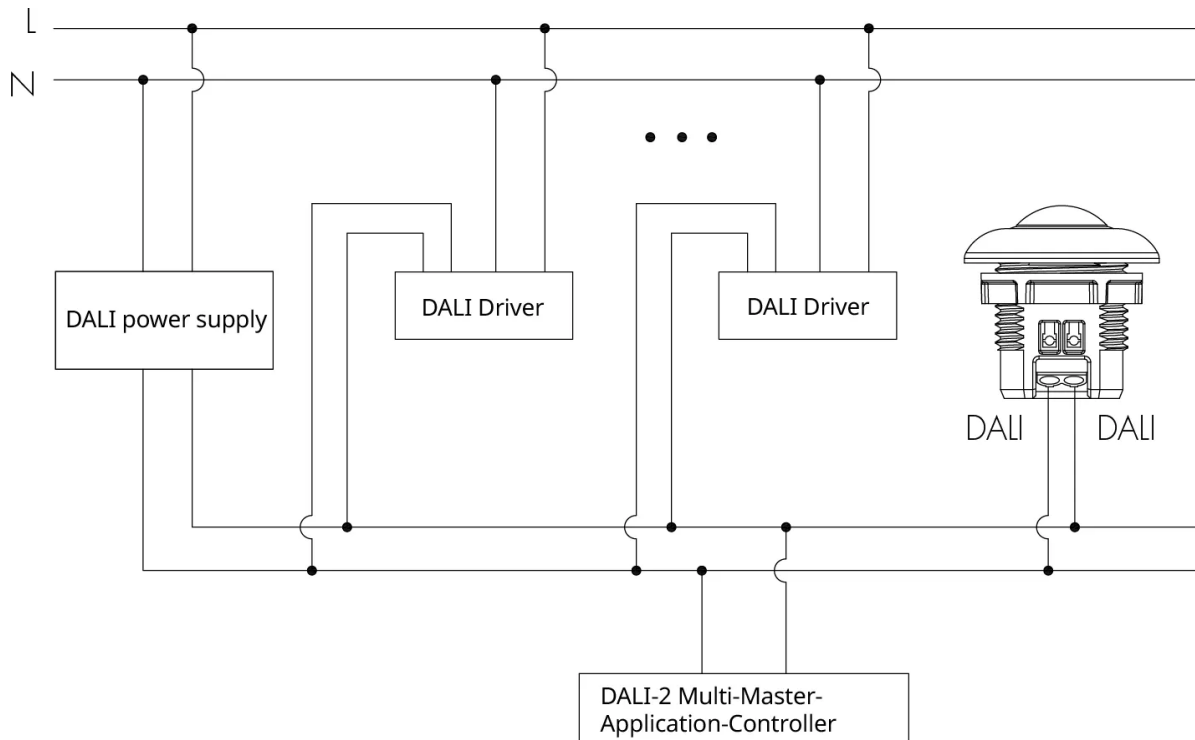
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Wire Preparation



To make or release the wire from the terminal, use a screwdriver to push down the button. 1. 100 metres (total) max. for 0.5mm² CSA (Ta = 50°C) 2. 150 metres (total) max. for 0.75mm² CSA (Ta = 50°C)

Wiring Diagram

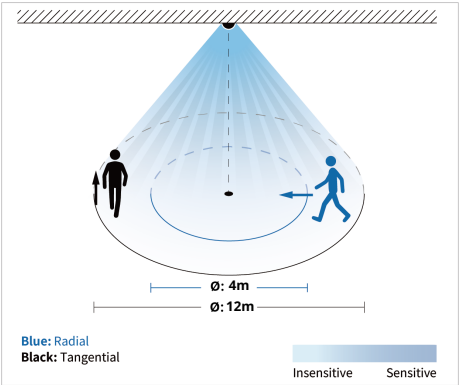


Detection Range

Single Person Walk (Ceiling mount)

- The data below is tested under following conditions:
- Single person walking
 - Sensor not connected to any driver that may have soft-on period
 - Testing temperature Ta = 20°C
 - The testing is conducted in an open and spacious indoor field, without noticeable obstacles or influences that may affect PIR performances.

Detection example 3m mounting height:



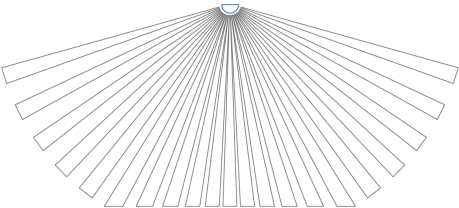
Tangential Movement

H[m]	3
Ø[m]	12

Radial Movement

H[m]	3
Ø[m]	4

Detection schematic diagram



Commissioning Instructions and Precautions

1. This product should be installed by a qualified electrician.
 2. To ensure better Bluetooth transmission, install the sensor head outside the surface of the light fixture.
 3. Avoid direct light exposure of the sensor head by the light fixture to ensure the accuracy of the daylight sensor.
 4. HIR61 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.
 5. This product has been tested in accordance with IEC 62386 and complies with the relevant DALI-2 application parts. DALI-2 testing was performed using the official DALI test sequence software (version 2.2.0.0), covering the applicable IEC 62386 parts (e.g. Part 101, Part 103, Part 303, Part 304, Part 351). DALI-2 certification verifies compliance within the defined test scope.
- However, certification does not eliminate the possibility of system-level compatibility issues arising from differences in device implementation or system design among manufacturers. Therefore, functional verification and on-site testing are required as part of the final system commissioning to ensure proper operation and compliance with project requirements.

Warning: For additional important documents, including installation precautions, product guidelines, and guarantee conditions, please refer to the official downloads.

<https://hytronik.com/service/downloads>

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Options

Accessories



Sensor fixation accessory | Zhaga Book 20 | White color

HA04

www.hytronik.com/product/HA04



Sensor fixation accessory | Zhaga Book 20 | White color

HA05

www.hytronik.com/product/HA05

Functions and Features



D4i Certified

This product is certified under the D4i specification by the DALI Alliance, ensuring compliance with the relevant DALI-2 and D4i requirements for interoperability, safety and performance. Certification guarantees that the device meets the standardized electrical, digital interface and device-type requirements defined for D4i ecosystems.



DALI-2 Certified

The product is DALI-2 certified, ensuring compatibility with DALI-2 control devices and compliance with relevant international lighting control standards. Certified product details can be verified via the DALI Alliance product database.



Zhaga Book 20 Standard

This product complies with the Zhaga Book 20 standard, defining a standardised mechanical, electrical and communication interface for sensor nodes used primarily in indoor smart lighting applications. It ensures interchangeability and interoperability within connected lighting systems, supporting flexible sensor integration and scalable system design.

Check out for further explanation of features

<https://hytronik.com/solutions/lighting-control-features>