

Product Description

HIR15/BLE is a Bluetooth PIR motion sensor with dimming, tunable white, and daylight control. It incorporates Photocell Advance technology, using two photocells to differentiate natural from artificial light. Equipped with an integrated DALI bus power supply and PSU switch, it can directly power connected DALI devices without the need for an external PSU. Compatible with Zhaga Book 18 and DALI-2, it features an IP65 rating and supports installation heights up to 15 m, making it ideal for industrial and outdoor applications. Bluetooth Mesh enables wireless control and simple setup via The Lena Lighting Clue app, reducing installation costs and adding smart value to luminaires.



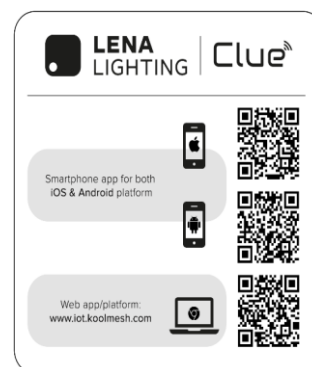
TYPE D

App Features

- Quick setup mode & advanced setup mode
- Tri-level control
- Daylight harvest
- Circadian rhythm (Human centric lighting)
- Floorplan feature to simplify project planning
- Web app/platform for dedicated project management
- Lena Lighting Clue iPad version for on-site configuration
- Grouping luminaires via mesh network
- Scenes
- Detailed motion sensor settings
- Dusk/Dawn photocell (Twilight function)
- Push switch configuration
- Schedule to run scenes based on time and date
- Astro timer (sunrise and sunset)
- Staircase function (primary & secondary)
- Internet-of-Things (IoT) featured
- Device firmware update over-the-air (OTA)
- Device social relations check
- Bulk commissioning (copy and paste settings)
- Dynamic daylight harvest auto-adaptation
- Power-on status (memory against power loss)
- Offline commissioning
- Different permission levels via authority management
- Network sharing via QR code or keycode
- Remote control via gateway support HBGW01
- Interoperability with Bluetooth product portfolio
- Compatible with EnOcean BLE switches
- Continuous development in progress...

Hardware Features

- D4i Certified (Type D)
- Support the control of DT6/DT8 and D4i drivers
- Supports reading luminaire, energy, and diagnostics data provided by the connected D4i drivers.
- Photocell Advance™
- Tunable white
- IP65 design
- Zhaga Book 18 standard
- High-bay (up to 15m height)
- 5-year warranty



Technical Specifications

Bluetooth Transceiver	
Operation frequency	2.4 GHz - 2.483 GHz
Transmission power	4 dBm
Range (Typical indoor)	10~30m
Protocol	Bluetooth 5.0 SIG Mesh

Input & Output Characteristics	
Operating voltage	24 VDC
Stand-by power	< 0.5 W
Output*	I guaranteed: 10mA I max: 15mA U rated: 16VDC

* The DALI output is disabled by default. To enable it, connect to the Lena Lighting Clue app and adjust the settings manually.

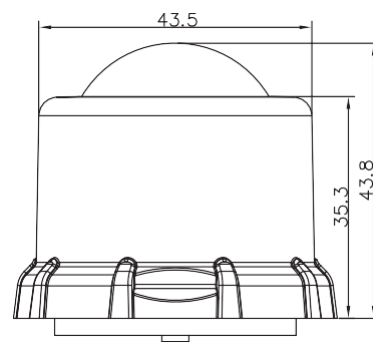
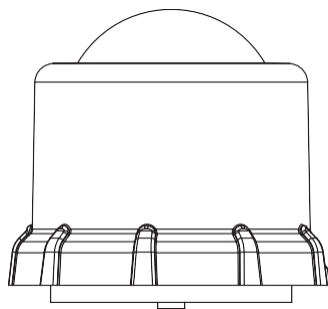
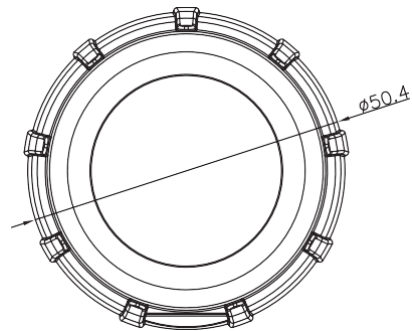
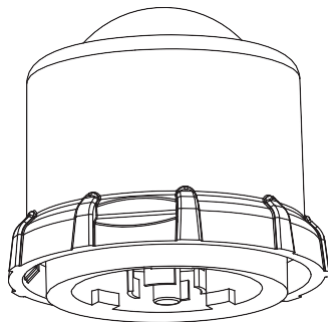
Safety & EMC	
EMC standard (EMC)	EN61547, EN55015
Safety standard (LVD)	EN61347-1 EN61347-2-11
RED	EN300328, EN301489-1/-17EN50663
Certification	CE , UKCA

Sensor Data	
Sensor principle	PIR
Detection range*	Max installation height: 15m (forklift) 12m (person) Max diameter(∅): 24m (forklift) 20m (person)
Detection angle	360°
Lux Range	0 ~ 1000 lux
Sensitivity	10% / 30% / 50% / 75% / 100%

* The detection range is heavily influenced by sensor placement (angle) and different walking paces. It may be reduced under certain conditions.

Environment	
Operation temperature	Ta: -20°C ~ +50°C
Storage temperature	Ta: -25°C ~ +70°C
Relative humidity	10 ~ 90%
IP rating	IP65
Insulation	Class II

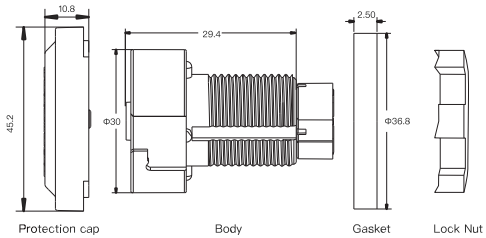
Mechanical Structure & Dimensions



Receptacle Accessory

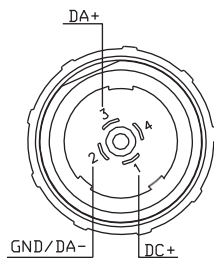
The HA18SKT receptacle is designed to be compatible with the SAM15 and HIR15 series products. It provides a Zhaga Book 18 standard interface, suitable for roadway lighting, area lighting, and occupancy lighting applications.

Mechanical Structure & Dimensions



Note: HA18SKT not included in the package.

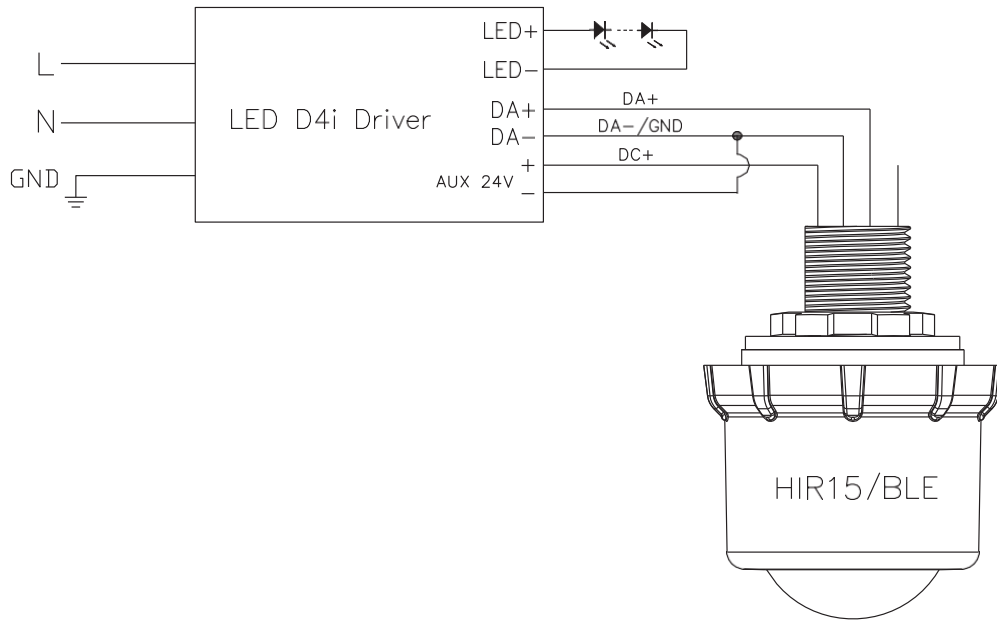
Wiring Diagram Notes



- Terminal block 4 is left unpopulated by default. No wiring required.
- For reliable operation, ensure at least one DALI PSU is present on the bus. If multiple PSUs are connected in parallel, the total output must not exceed 250 mA. (For better compatibility, a single PSU is recommended.)
- By default, the DALI power supply of the HIR15/BLE sensor is disabled. If activation is required, it must be done manually via the Lena Lighting Clue app.

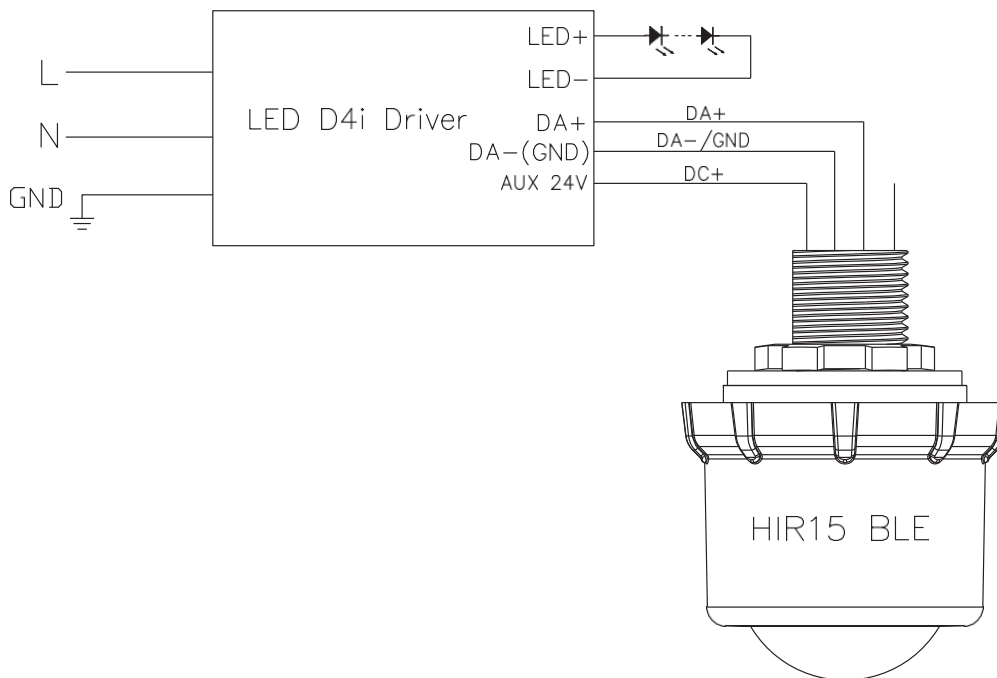
Wiring Diagram 1

D4i Driver with Common Negative



Wiring Diagram 2

D4i Driver with Isolated Negative



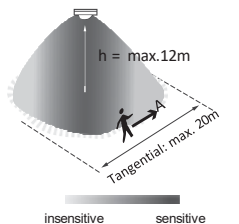
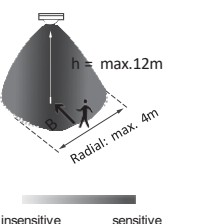
Detection Range

*The sensor detection area shown in this table is based on an open space.

In environments with hard surfaces such as metal racking or glass corridors, the detection range may be extended by up to 30% due to reflections or signal penetration.

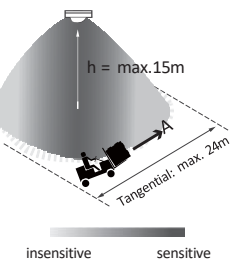
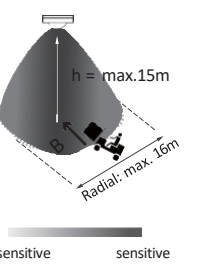
The data below is tested under following conditions:

- Single person walking;
- Sensor not connected to any driver that may have soft-on period;
- The testing is conducted in an open and spacious indoor field, without noticeable obstacles or influences that may affect PIR performances.

A: Tangential movement	B: Radial movement	Mount height	Tangential Movement (A)	Radial Movement (B)
		3m	max 50m ² (∅ = 8m)	max 7m ² (∅ = 3m)
		5m	max 79m ² (∅ = 10m)	max 7m ² (∅ = 3m)
		8m	max 154m ² (∅ = 14m)	max 13m ² (∅ = 4m)
		12m	max 314m ² (∅ = 20m)	max 13m ² (∅ = 4m)

The data above is tested under following conditions:

- Forklift driving at a speed of 5km/h;
- Sensor not connected to any driver that may have soft-on period;
- Testing temperature Ta = 20°C;

A: Tangential movement	B: Radial movement	Mount height	Tangential (A)	Radial (B)
		10m	max 380m ² (∅ = 22m)	max 201m ² (∅ = 16m)
		11m	max 452m ² (∅ = 24m)	max 201m ² (∅ = 16m)
		12m	max 452m ² (∅ = 24m)	max 201m ² (∅ = 16m)
		13m	max 452m ² (∅ = 24m)	max 177m ² (∅ = 15m)
		14m	max 452m ² (∅ = 24m)	max 133m ² (∅ = 13m)
		15m	max 452m ² (∅ = 24m)	max 113m ² (∅ = 12m)

Shielding Accessory



HAS15

Specifications

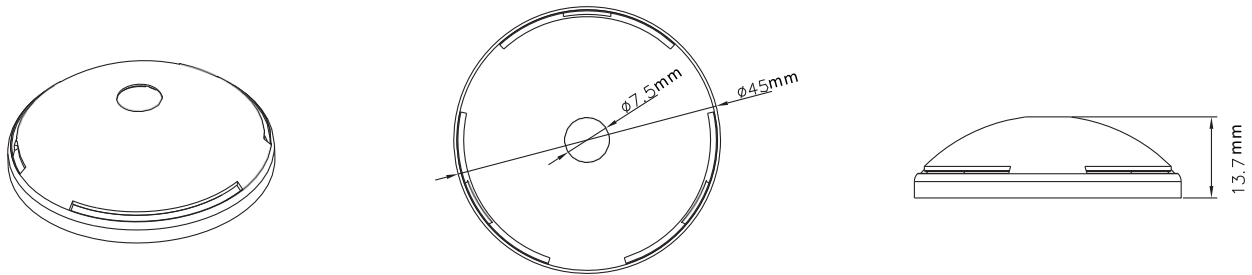
Product weight	1.0 g
Product height	13.7 mm
Product length	45 mm
Product width	45 mm

*Note: HAS15 included in the package.

Product Description

Achieve precise adjustment of the detection range, block interference sources (such as moving machines and elevators) to prevent triggering the sensor. The line pattern of the shielding accessory can be freely removed by cutting to achieve a different range of shielding induction, for example, rectangular detection and semi-sphere detection. The portable design also provides an easy installation, which only needs to buckle the shielding accessory onto the lens.

Mechanical Structure & Dimensions



Installation Instruction



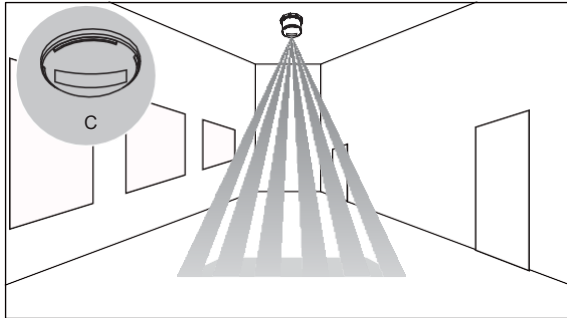
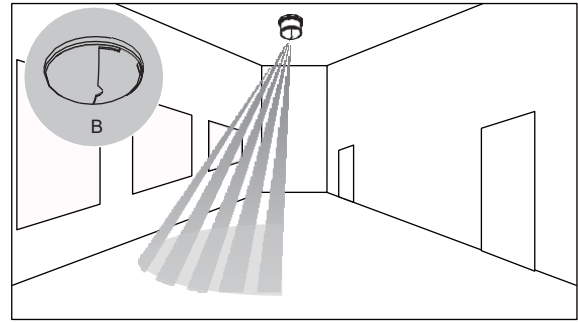
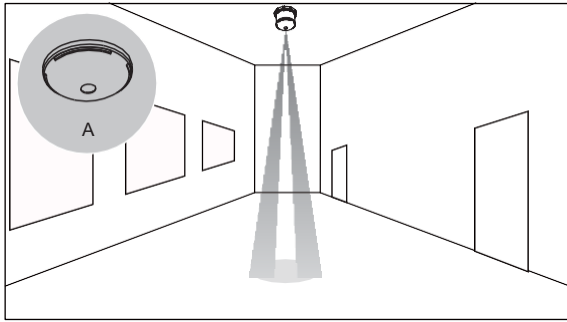
Step 1: Installation

Align the HAS15 cover with the HIR15 series sensor and press down evenly with two fingers. Once an audible sound is heard, the cover is securely installed.

Step 2: Removal

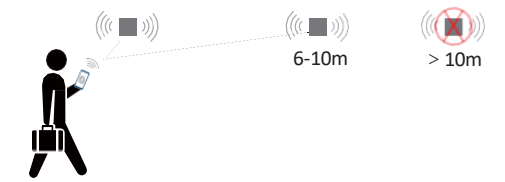
To detach the HAS15 cover, locate the release notch on the edge. Gently lift the cover upward from the notch to remove it.

Picture Application Example



Placement Guide and Typical Range

Smart Phone to Device Range



The smart device with the App installed will have a typical range of 10m, but varies from device to device. During commissioning, the installer will need to be in range of the devices when searching for devices to add to the network.

Once the devices have been added to the network via the App, the devices will start communicating within the wireless mesh. This means that once the network is complete, all devices are accessible from the smart device when in a 20m range of a single point.

For more information, please contact iot@lenalighting.pl