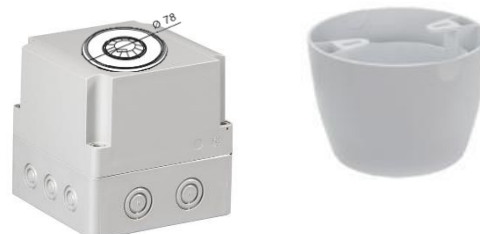




624834 Czujnik PIR HYT DALI-2 HIR23/D2 IoT
 624995 Czujnik PIR HYT DALI-2 HIR23/D2/W IoT
 625268 Czujnik PIR HB HYT DALI-2 HIR23/D2/H IoT
 IOT0095 Czujnik PIR HB HYT DALI-2 HIR23/D2/H IoT czarny RAL 9005

Product Description

HIR23/D2 stand-alone PIR & daylight sensors have been certified as DALI-2 input device with main purpose to incorporate into DALI-2 application controller/master. It is ideal for typical indoor applications such as office, classroom, healthcare and other commercial areas.



Hardware Features

-  2-in-1: PIR motion sensor + Daylight sensor
-  IP20/IP65 ceiling/surface mount box available as accessory
-  Various PIR lens and blind inserts options
-  User-friendly design for installation
-  High bay version available (up to 15m in height)
-  5-year warranty
-  Compliant to standard IEC62386_101,103,303,304

Technical Specifications

Sensor Data	
Sensor Model	PIR detection
HIR23/D2	Installation Height : 6m Detection Range (∅) : 9m
HIR23/D2/W	Installation Height : 6m Detection Range (∅) : 18m
HIR23/D2/H	Installation height: 15m (forklift) 12m (person) Detection range (∅): 24m
Lux reading range	< 1000 lux
Detection angle	360°

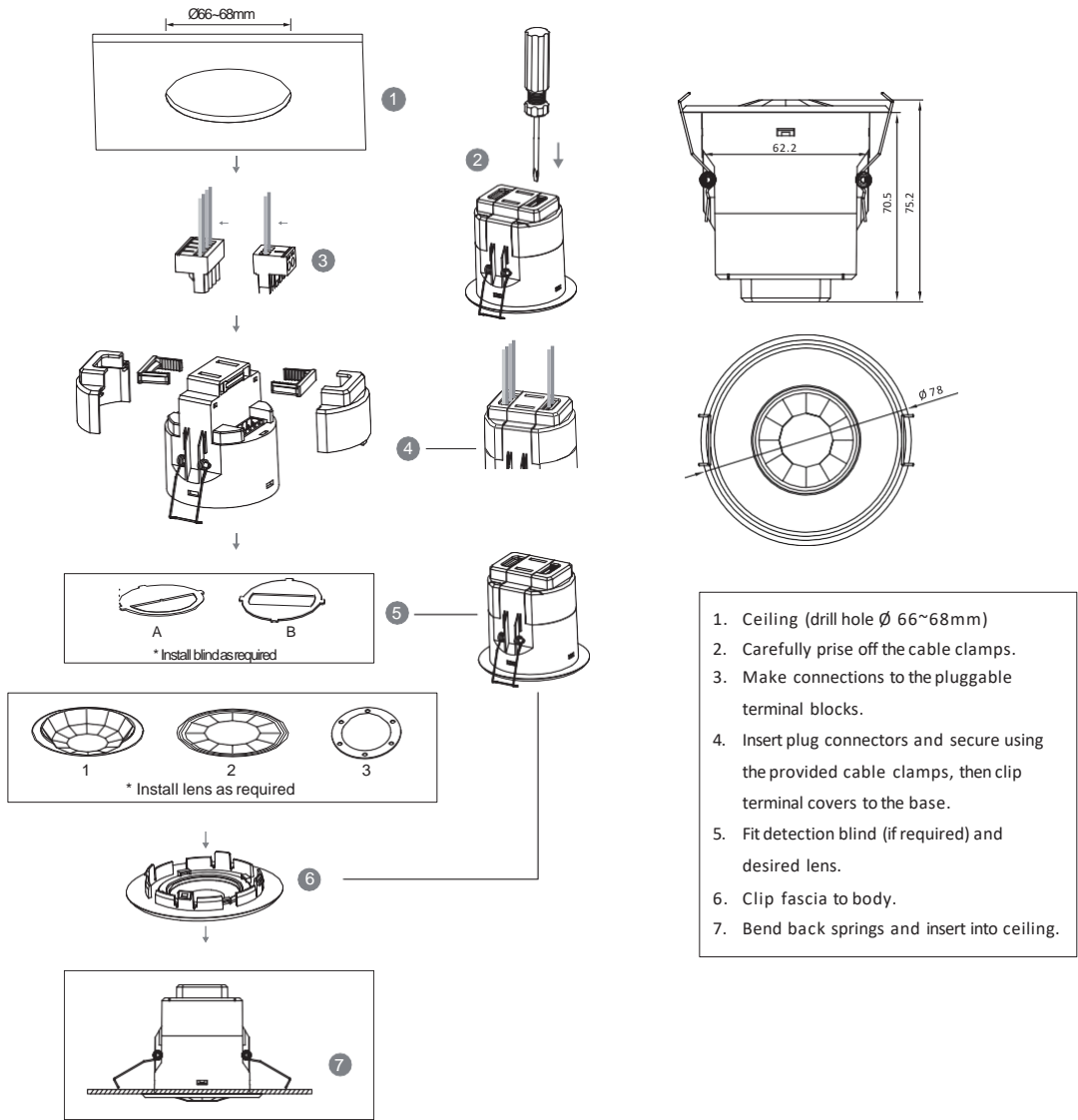
Input & Output Characteristics	
Operating voltage	9.5~22.5VDC
Consumption DALI	Max. 10 mA(no LED)
BUS current	Max. 12 mA(with LED)
Identify device	Red LED flashes 15S
Warming-up	5s

Safety & EMC	
EMC standard (EMC)	EN55015, EN61000, EN61547
DALI	IEC60386-101, 103, 303, 304
RED	EN300328, EN301489-1/-17
Certification	CE, REACH, UKCA, RCM, ROHS compliance

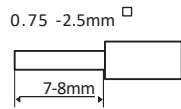
Environment	
Operation temperature	Ta: -20°C ~ +50°C
IP rating	IP20

* For more details of detection range, please refer to "detection pattern" section.

Mechanical Structure & Dimensions

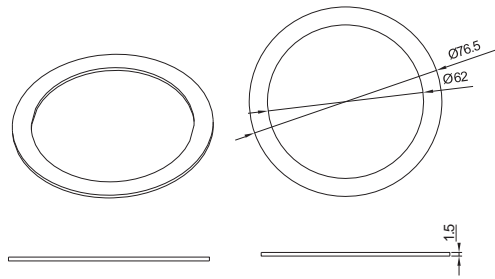


Wire Preparation

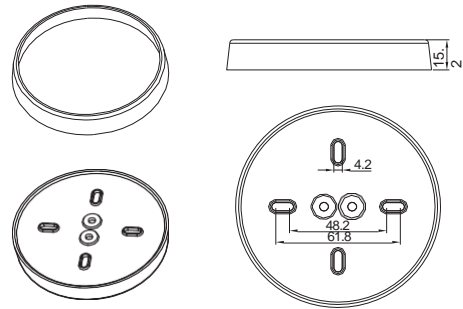


Pluggable screw terminal. It is recommended to make connections to the terminal before fitting to the sensor.

Small silicon water-proof gasket dimension(size:mm)



Big silicon water-proof gasket dimension(size:mm)



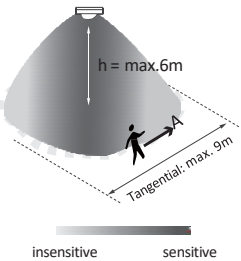
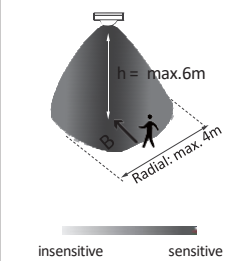
Detection Pattern & Optional Accessories

1. HIR23/D2 (Low-bay)

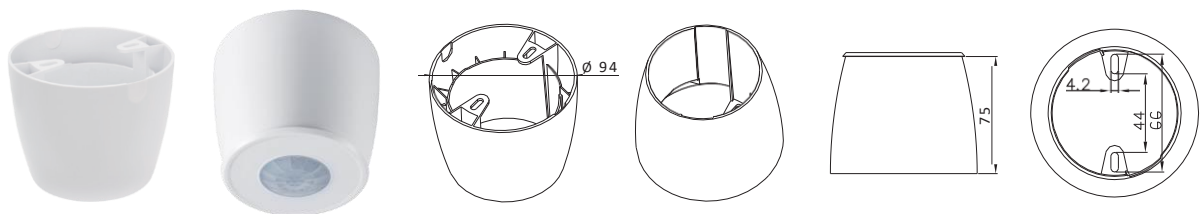


HIR23/D2: Low-bay flat lens detection pattern for **single person** @ Ta = 20°C

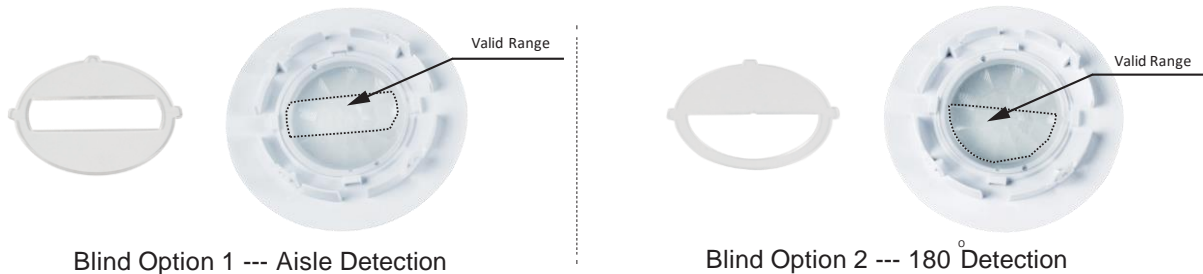
(Recommended ceiling mount installation height **2.5m-6m**)

A: Tangential movement	B: Radial movement	Mount height	Tangential (A)	Radial (B)
		2.5m	max 50m ² (∅ = 8m)	max 13m ² (∅ = 4m)
		3m	max 64m ² (∅ = 9m)	max 13m ² (∅ = 4m)
		4m	max 38m ² (∅ = 7m)	max 13m ² (∅ = 4m)
		5m	max 38m ² (∅ = 7m)	max 13m ² (∅ = 4m)
		6m	max 38m ² (∅ = 7m)	max 13m ² (∅ = 4m)

Optional Accessory —Ceiling/Surface Mount Box: HA03



Optional Accessory —Blind Insert for Blocking Certain Detection Angles



3. HIR23/D2/W (Wide range Low-bay)

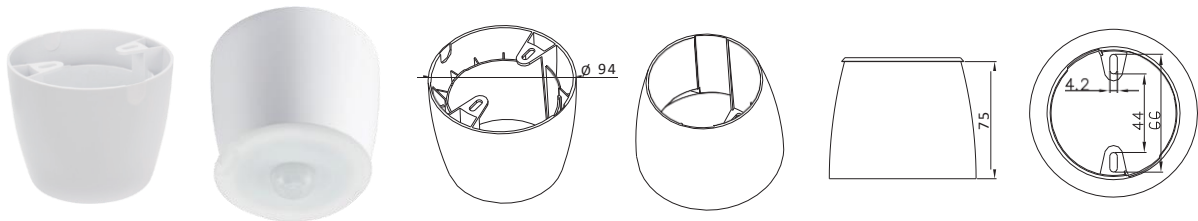


HIR23/D2/W: Low-bay convex lens detection pattern for **single person** @ $T_a = 20^\circ\text{C}$

(Recommended ceiling mount installation height **2.5m-6m**)

A: Tangential movement	B: Radial movement	Mount height	Tangential (A)	Radial (B)
		2.5m	max 254m ² ($\varnothing = 18\text{m}$)	max 28m ² ($\varnothing = 6\text{m}$)
		3m	max 254m ² ($\varnothing = 18\text{m}$)	max 28m ² ($\varnothing = 6\text{m}$)
		4m	max 154m ² ($\varnothing = 14\text{m}$)	max 28m ² ($\varnothing = 6\text{m}$)
		5m	max 113m ² ($\varnothing = 12\text{m}$)	max 28m ² ($\varnothing = 6\text{m}$)
		6m	max 79m ² ($\varnothing = 10\text{m}$)	max 13m ² ($\varnothing = 4\text{m}$)

Optional Accessory – Ceiling/Surface Mount Box: HA03



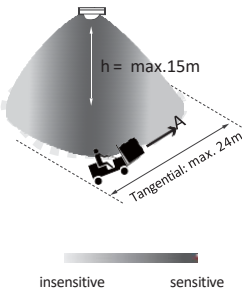
4. HIR23/D2/H (High-bay)

HIR23/D2/H: High-bay lens detection pattern for **forklift** @ Ta = 20°C

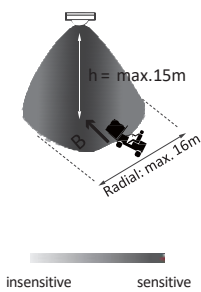
(Recommended ceiling mount installation height **10m-15m**)



A: Tangential movement



B: Radial movement



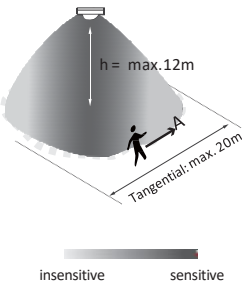
Mount height	Tangential (A)	Radial (B)
10m	max 380m ² (∅ = 22m)	max 201m ² (∅ = 16m)
11m	max 452m ² (∅ = 24m)	max 201m ² (∅ = 16m)
12m	max 452m ² (∅ = 24m)	max 201m ² (∅ = 16m)
13m	max 452m ² (∅ = 24m)	max 177m ² (∅ = 15m)
14m	max 452m ² (∅ = 24m)	max 133m ² (∅ = 13m)
15m	max 452m ² (∅ = 24m)	max 113m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



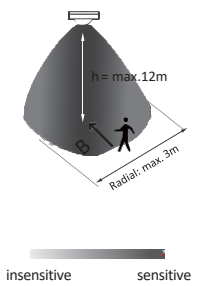
HIR23/D2/H: High-bay lens detection pattern for **single person** @ Ta = 20°C

(Recommended ceiling mount installation height **2.5m-12m**)

A: Tangential movement

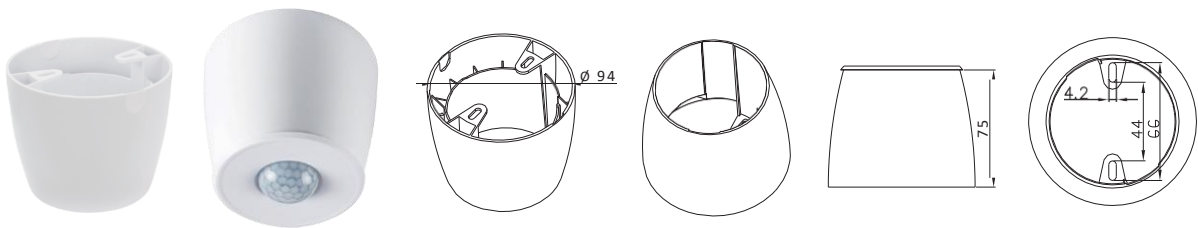


B: Radial movement

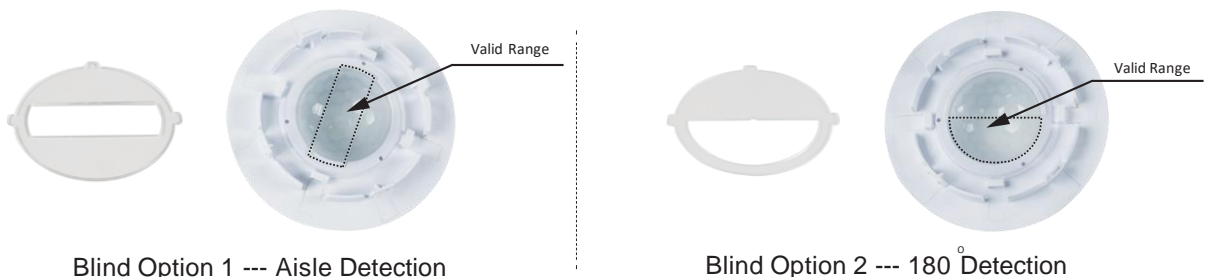


Mount height	Tangential (A)	Radial (B)
2.5m	max 50m ² (∅ = 8m)	max 7m ² (∅ = 3m)
6m	max 104m ² (∅ = 11.5m)	max 7m ² (∅ = 3m)
8m	max 154m ² (∅ = 14m)	max 7m ² (∅ = 3m)
10m	max 227m ² (∅ = 17m)	max 7m ² (∅ = 3m)
11m	max 269m ² (∅ = 18.5m)	max 7m ² (∅ = 3m)
12m	max 314m ² (∅ = 20m)	max 7m ² (∅ = 3m)

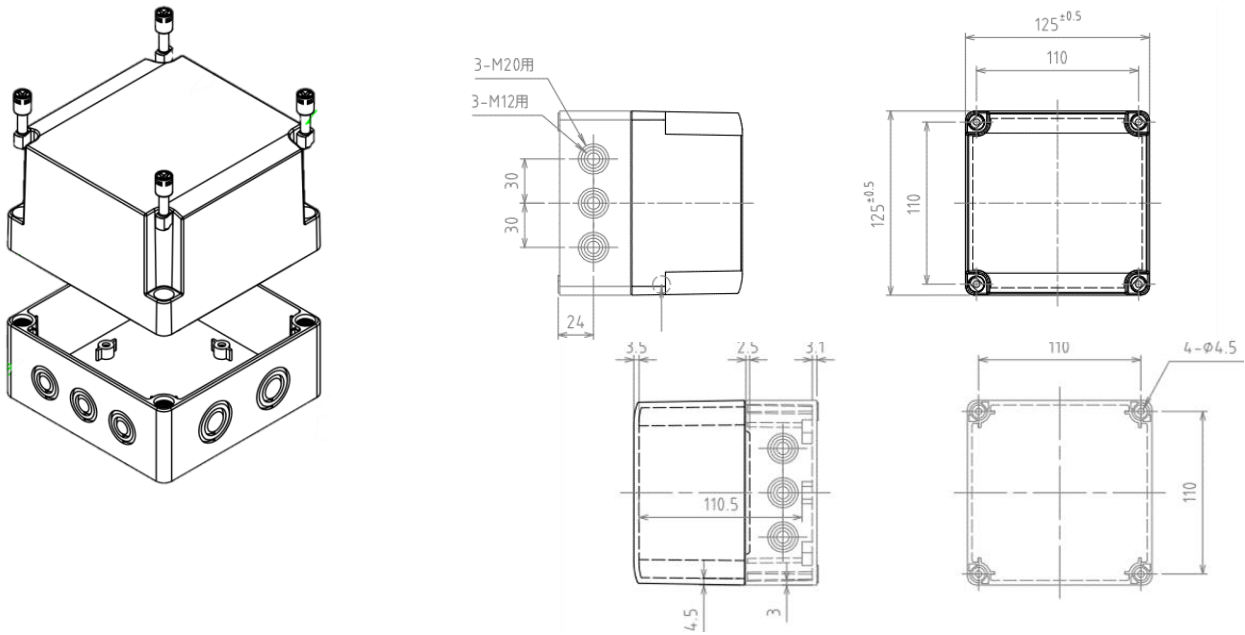
Optional Accessory —Ceiling/Surface Mount Box: HA03



Optional Accessory —Blind Insert for Blocking Certain Detection Angles

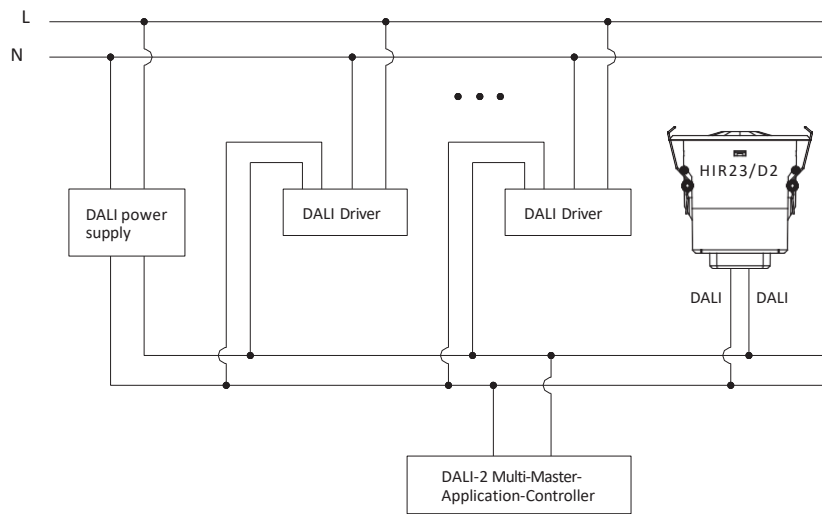


Optional Equipment – Ceiling/Surface Mount Box: TAKACHI IP67



Manufacturer's code	Dimensions			Internal dimensions			Color	Weight [g]
	S	W	G	s	w	g		
SPCM13 1313G	125	125	125	114.5	110.5	90	RAL7035	401

Wiring Diagram



Note: HIR23/D2 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.

For more information, please contact iot@lenalighting.pl