

SENSOTEC Sensor NET Casambi

110102854	SENSOTEC Sensor PIR NET Casambi
110102853	SENSOTEC Sensor HF2 NET Casambi
110102855	SENSOTEC Extension NET Casambi
110102846	SENSOTEC Sensor HB PIR 3360 NET Intra Casambi
110102847	SENSOTEC Sensor HB PIR 3360 NET Wire Casambi
110102848	SENSOTEC Sensor HB PIR 3360 NET Zhaga Casambi
110102850	SENSOTEC Sensor HB PIR 345 NET Intra Casambi
110102851	SENSOTEC Sensor HB PIR 345 NET Wire Casambi
110102852	SENSOTEC Sensor HB PIR 345 NET Zhaga Casambi

CASAMBI



PIR NET



The unobtrusive PIR presence detector with a detection area of 4x4m (movement 6x6m) is a compact and reliable recessed luminaire sensor for applications up to a maximum height of 5m.

HF2 NET



The HF sensor module has a detection range of up to 8m and a max. height of 3.5m. The presence detection is carried out through glass and non-metallic materials and can therefore be used inside luminaires.

Extension NET



The extension is used to expand the Bluetooth Mesh network and is intended for Dali luminaires without sensors.

HB PIR 3360 NET



A reliable motion detector with a long range, ideal for high ceilings in industrial buildings or commercial properties. For installation heights of up to 14m and a maximum detection area with a diameter of 36m, this high-precision PIR sensor enables monitoring of up to 1000 square metres.

HB PIR 345 NET



The Highbay motion detector reliably monitors a rectangular detection area up to 30x4m and a mounting height of 14m. Ideal for detection from great heights in warehouses, high-bay warehouses, machine shops, check-in and waiting halls.

Connection variants

Intra



Wire



Zhaga



SENSOTEC NET CASAMBI product family

Easy to install, ready for networking via Casambi - The innovative NET sensors network wirelessly via a Casambi network, can be configured via app and control LED drivers via the DALI bus. Simple, flexible, quick to install.

The NET product family includes the PIR, HF2, Extension, HB PIR 3360 and HB PIR 345 NET sensors.

Advantages

- Sensor with integrated DALI-2 application controller
- Direct connection to a DALI interface
- Straightforward wiring, powered via the DALI bus
- Mesh network in accordance with the Casambi specification for networking and integrating sensors and luminaires
- Parameterization and configuration via Casambi app
- Wireless firmware update of the entire network
- Constant-lighting control
- Predefined Scenes
- Any selectable main and basic light level
- User-defined lighting groups with configurable behavior

Further information on the individual sensors

PIR NET, HF2 NET, Extension NET	3
Sensor technical specifications.....	3
Dimensional drawings	4
Sensor detection zones	4
Installation advice PIR NET.....	5
Installation advice HF2 NET.....	5
HB PIR 3360 NET Intra, Wire, Zhaga	5
Sensor technical specifications.....	5
Dimensional drawings	6
Sensor detection zones	7
Installation advice HB PIR 3360 NET.....	7
HB PIR 345 NET Intra, Wire, Zhaga	8
Sensor technical specifications.....	8
Dimensional drawings	8
Sensor detection zones	9
Installation advice HB PIR 345 NET	10
General information	10
Circuit diagram	10
General installation advantages.....	10
Bluetooth antenna locations.....	11
Safety precautions.....	11
Operation and configuration.....	11
Additional product information.....	11
Conformity / marks of conformity	11
Note.....	11

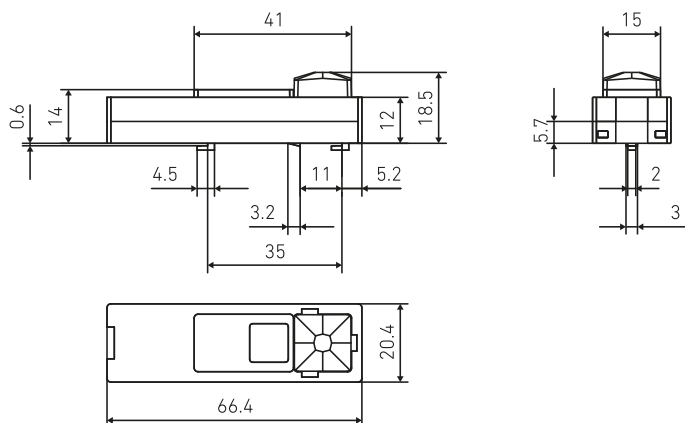
PIR NET, HF2 NET, Extension NET

Sensor technical specifications

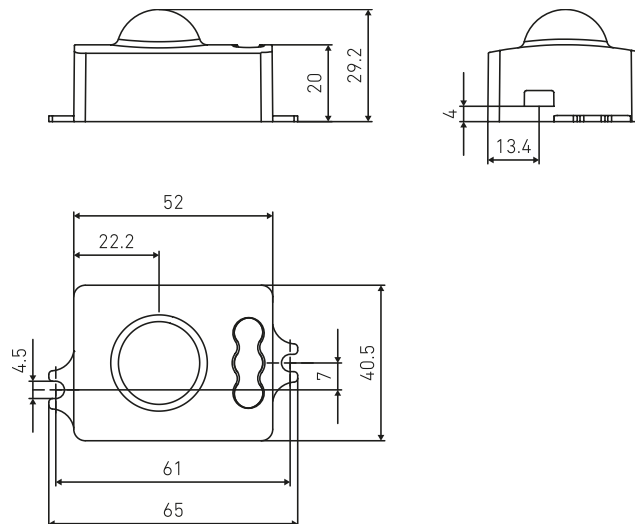
	PIR NET	HF2 NET	Extension NET
Article number	110102854	110102853	110102855
Bluetooth Device Name	STE PIR NET	STE HF2 NET	STE EXT NET
Type	9018	9017	9020
Dimensions	66.4 × 20.4 × 18.5mm Fixing spacing 35mm 3D data available online	52 × 40.5 × 29.2mm Hole spacing 61mm 3D data available online	47 × 29 × 20mm Hole spacing 55mm 3D data available online
Features	Motion detector Light sensor Feedback indicator Casambi Evolution	Motion detector Light sensor Feedback indicator Casambi Evolution	- - Feedback indicator Casambi Evolution
Sensor technology	Passive infrared technology	High-frequency technology	-
Transmitter power	-	1 - 2mW	-
Transmission frequency	-	5,8GHz	-
Light measurement range	4 - 1000lx	4 - 1000lx	-
Angle of coverage	-	360° with 160° angle of aperture	-
Mounting height	2.0 - 5.0m	2.5 - 3.5m	-
Optimum mounting height	2.8m	2.8m	-
Reach, radial	4 x 4m (16m ²)	Ø 8m (50m ²)	-
Reach, tangential	6 x 6m (36m ²)	Ø 8m (50m ²)	-
Connection	0.34 - 0.75mm ²	0.34 - 0.75mm ²	0.34 - 0.75mm ²
Supply voltage / current consumption Dali	12 - 22.5VDC / max. 46mA	12 - 22.5VDC / max. 46mA	12 - 22.5VDC / max. 46mA
IP rating:	IP20	IP20	IP20
Temperature range	-25 to +55°C (tc +55°C)	-20 to +60°C (tc +60°C)	-25 to +60°C (tc +60°C)
Bluetooth Range	25m	15m	35m
Interfaces	Dali, Casambi	Dali, Casambi	Dali, Casambi
Approval marks / Conformity	CE	CE	CE
Standards	EN 61347-1 EN 61347-2-11 EN 55015 EN 61547 EN 301 489-1	EN 61347-1 EN 61347-2-11 EN 55015 EN 61547 EN 301 489-1 EN 300 440	EN 61347-1 EN 61347-2-11 EN 55015 EN 61547 EN 301 489-1

Dimensional drawings

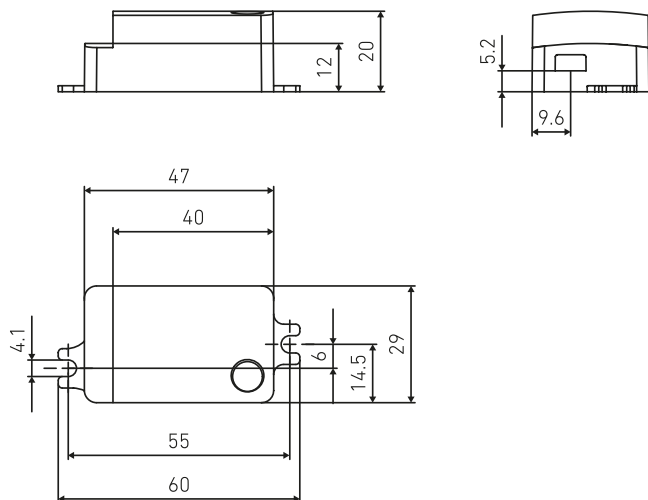
PIR NET



HF2 NET

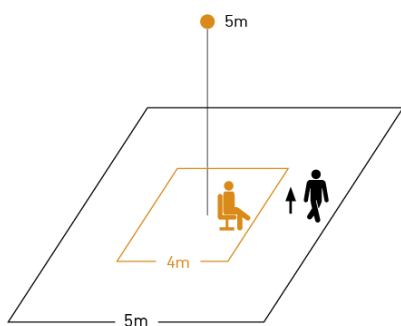


Extension NET



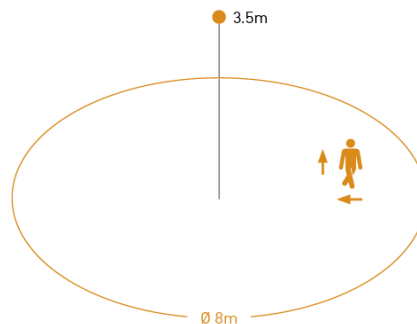
Sensor detection zones

PIR NET



Possible mounting height 2m - 5m
Orange: presence
Black: tangential

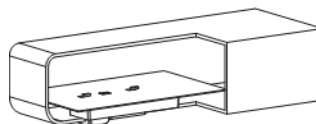
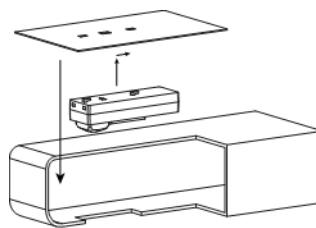
HF2 NET



Possible mounting height 2.5m - 3.5m
Orange: radial and tangential

Installation advice PIR NET

- Provide an aperture 15mm wide x 41mm long.
- Suitable for material thicknesses from 0.5 - 2mm.
- The sensor must have an unobstructed line of vision to the detection area.



Installation advice HF2 NET

- The sensor is intended to be used indoors only.
- Metallic Materials may influence the performance of the Bluetooth functionality.
- Design-in support from STEINEL specialists.
- It is highly recommended not to place the sensor in the immediate vicinity of radio transmitters and moving objects (i.e. WLAN routers).

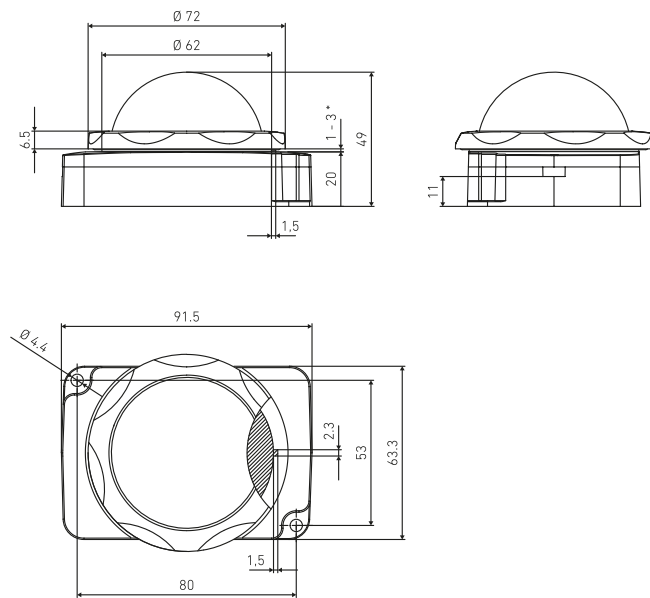
HB PIR 3360 NET Intra, Wire, Zhaga

Sensor technical specifications

	HB PIR 3360 NET Intra	HB PIR 3360 NET Wire	HB PIR 3360 NET Zhaga
Article number	110102846	110102847	110102848
Bluetooth Device Name	STE HB PIR 3360 NET I	STE HB PIR 3360 NET W	STE HB PIR 3360 NET Z
Type	9016	9022	9021
Dimensions	91.5 × 63.3 × 49mm 3D data available online	91.5 × 63.3 × 49mm 3D data available online	91.5 × 63.3 × 57mm 3D data available online
Features	Motion detector Light sensor Feedback indicator Casambi Evolution	Motion detector Light sensor Feedback indicator Casambi Evolution	Motion detector Light sensor Feedback indicator Casambi Evolution
Sensor technology	Passive infrared technology	Passive infrared technology	Passive infrared technology
Light measurement range	4 - 1000lx	4 - 1000lx	4 - 1000lx
Mounting height	2.8 - 14.0m	2.8 - 14.0m	2.8 - 14.0m
Reach, radial	Ø 14m (154m ²)	Ø 14m (154m ²)	Ø 14m (154m ²)
Reach, tangential	Ø 36m (1018m ²)	Ø 36m (1018m ²)	Ø 36m (1018m ²)
Connection	0.34 - 0.75mm ²	Connection strands (0.5mm ² , L=250mm, white)	Zhaga Book 18
Supply voltage / current consumption Dali	12 - 22.5VDC / max. 46mA	12 - 22.5VDC / max. 46mA	12 - 22.5VDC / max. 46mA
IP rating:	IP20 / IP65* * sealed lens	IP65	IP65
Temperatur range	-20 to +50°C (tc +50°C)	-20 to +50°C (tc +50°C)	-20 to +50°C (tc +50°C)
Bluetooth Range	35m	35m	35m
Interfaces	Dali, Casambi	Dali, Casambi	Dali, Casambi
Approval marks / Conformity	CE	CE	CE
Standards	EN 61347-1 EN 61347-2-11 EN 55015 EN 61547 EN 301 489-1	EN 61347-1 EN 61347-2-11 EN 55015 EN 61547 EN 301 489-1	EN 61347-1 EN 61347-2-11 EN 55015 EN 61547 EN 301 489-1

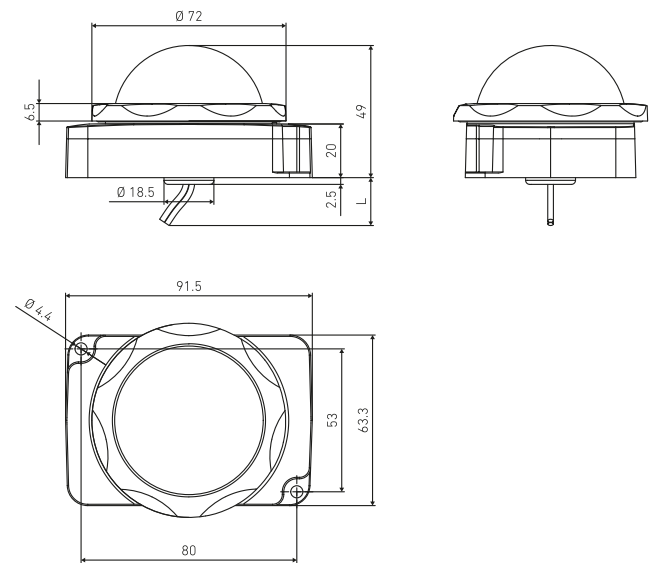
Dimensional drawings

HB PIR 3360 NET Intra

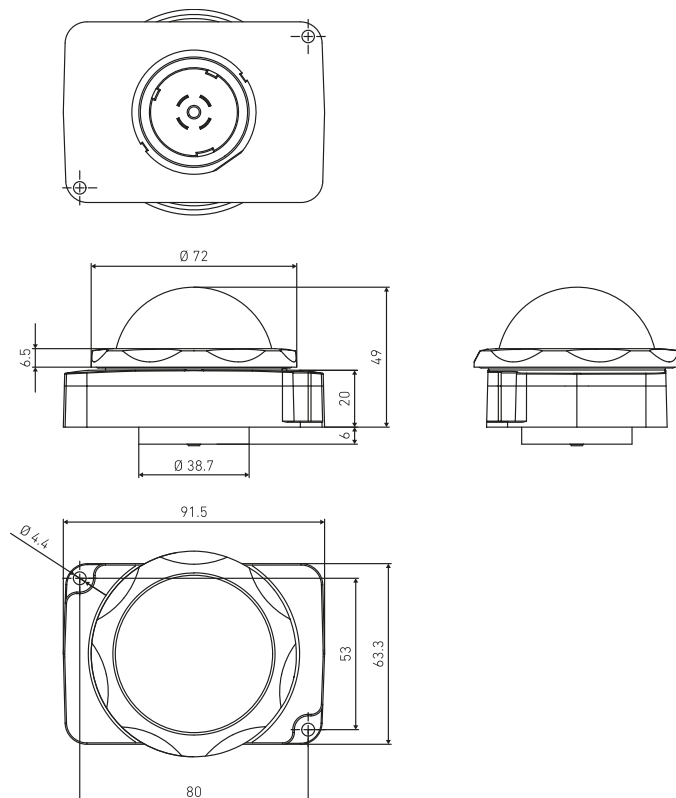


* wall thickness range

HB PIR 3360 NET Wire

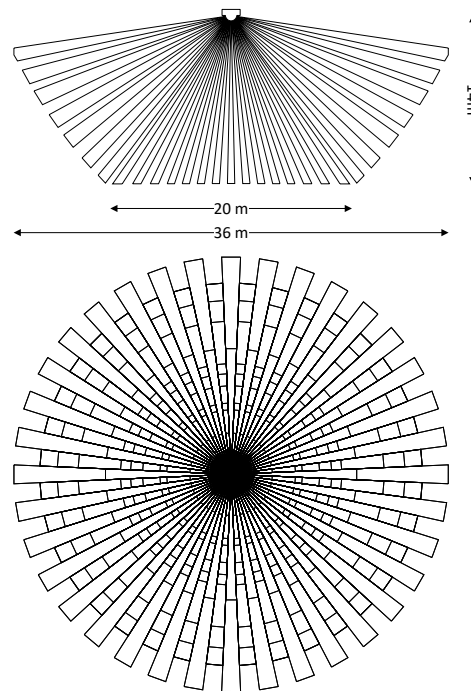
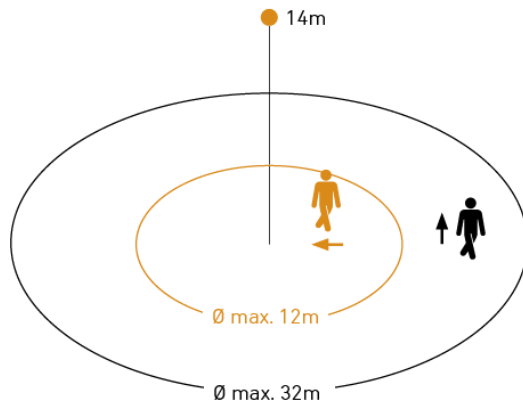


HB PIR 3360 NET Zhaga



Sensor detection zones

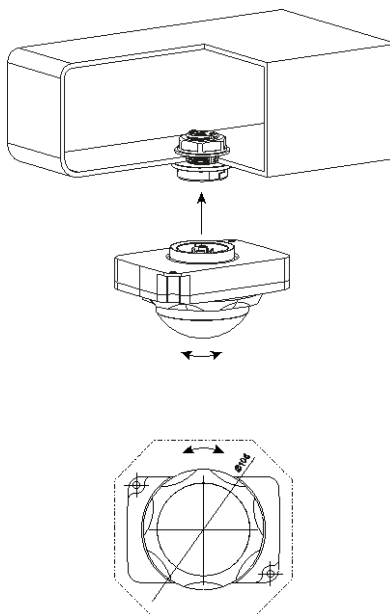
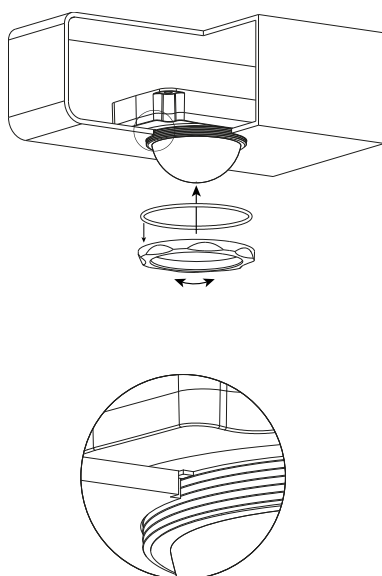
HB PIR 3360 NET



Possible mounting height: 2.8m - 14m
Orange: radial / Black: tangential

Mounting height	Detection Area (tangential)
14m	Ø 20m
9m	Ø 28m
6m	Ø 32m
2.8m	Ø 36m

Installation advice HB PIR 3360 NET



- Suitable for material thicknesses of 1 - 3mm.
- Hole diameter for lens 62,5 to 63mm.
- Alignment is done by mechanical positioning (see dimensional drawings).

- Clearance of Ø 106mm required for screwing the HB PIR 3360 NET Zhaga onto the Zhaga base.

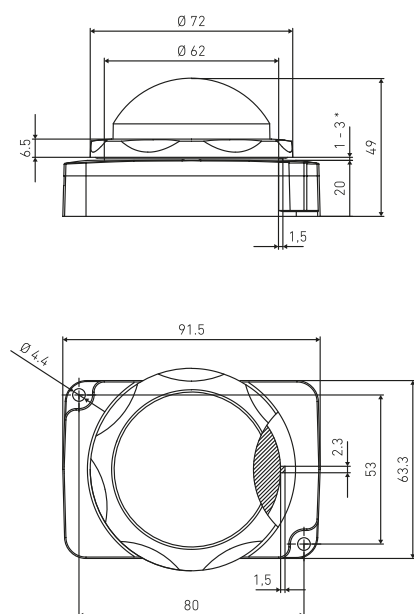
HB PIR 345 NET Intra, Wire, Zhaga

Sensor technical specifications

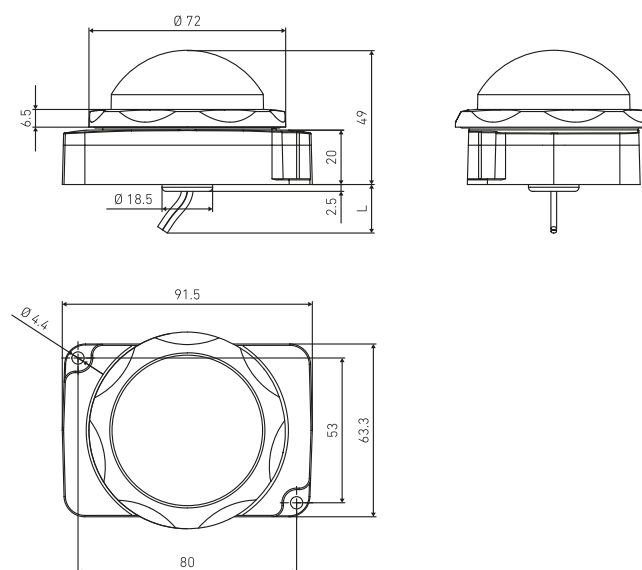
	HB PIR 345 NET Intra	HB PIR 345 NET Wire	HB PIR 345 NET Zhaga
Article number	110102850	110102851	110102852
Bluetooth Device Name	STE HB PIR 345 NET I	STE HB PIR 345 NET W	STE HB PIR 345 NET Z
Type	9015	9024	9023
Dimensions	91.5 × 63.3 × 49mm 3D data available online	91.5 × 63.3 × 49mm 3D data available online	91.5 × 63.3 × 57mm 3D data available online
Features	Motion detector Light sensor Feedback indicator Casambi Evolution	Motion detector Light sensor Feedback indicator Casambi Evolution	Motion detector Light sensor Feedback indicator Casambi Evolution
Sensor technology	Passive infrared technology	Passive infrared technology	Passive infrared technology
Light measurement range	4 - 1000lx	4 - 1000lx	4 - 1000lx
Mounting height	4.0 - 14.0m	4.0 - 14.0m	4.0 - 14.0m
Reach, radial	30 x 4m (120m ²)	30 x 4m (120m ²)	30 x 4m (120m ²)
Reach, tangential	30 x 4m (120m ²)	30 x 4m (120m ²)	30 x 4m (120m ²)
Connection	0.34 - 0.75mm ²	Connection strands (0.5mm ² , L=250mm, white)	Zhaga Book 18
Supply voltage / current consumption Dali	12 - 22.5VDC / max. 46mA	12 - 22.5VDC / max. 46mA	12 - 22.5VDC / max. 46mA
IP rating:	IP20 / IP65* * sealed lens	IP65	IP65
Temperature range	-20 to +50°C (tc +50°C)	-20 to +50°C (tc +50°C)	-20 to +50°C (tc +50°C)
Bluetooth Range	35m	35m	35m
Interfaces	Dali, Casambi	Dali, Casambi	Dali, Casambi
Approval marks / Conformity	CE	CE	CE
Standards	EN 61347-1 EN 61347-2-11 EN 55015 EN 61547 EN 301 489-1	EN 61347-1 EN 61347-2-11 EN 55015 EN 61547 EN 301 489-1	EN 61347-1 EN 61347-2-11 EN 55015 EN 61547 EN 301 489-1

Dimensional drawings

HB PIR 345 NET INTRA

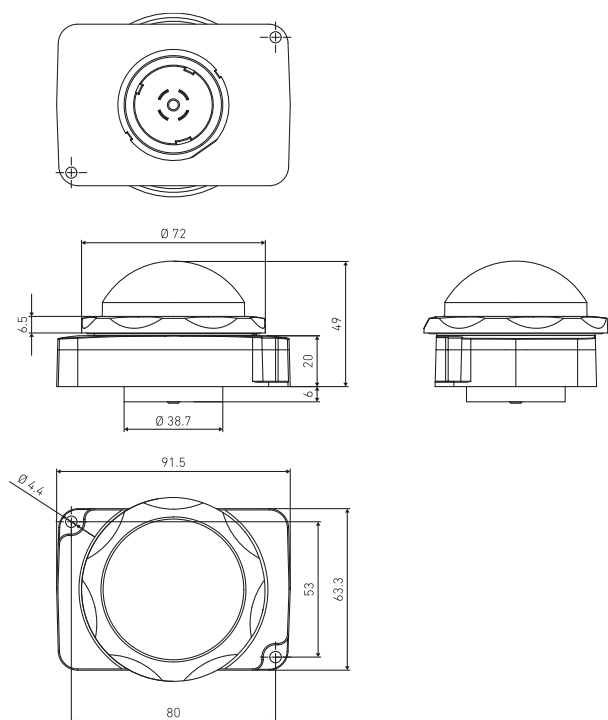


HB PIR 345 NET WIRE



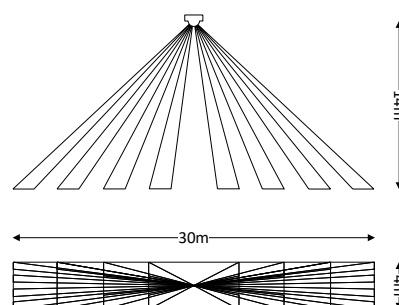
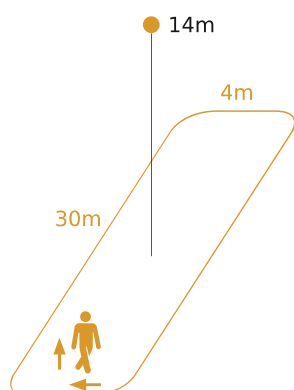
* wall thickness range

HB PIR 345 NET Zhaga



Sensor detection zones

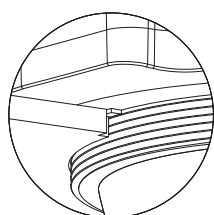
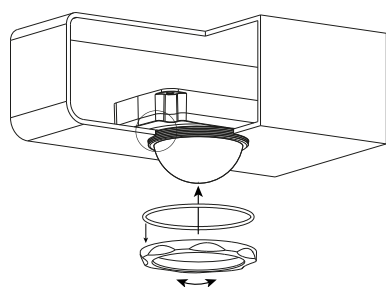
HB PIR 345 NET



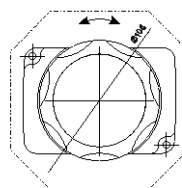
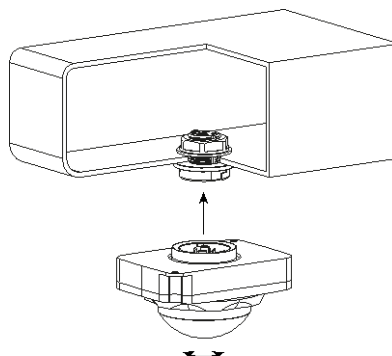
Possible mounting height: 4 - 14m
Orange: radial and tangential

Mounting height	Detection Area
14m	30m x 4m
10m	25m x 4m
8m	20m x 4m
6m	15m x 4m
4m	10m x 4m

Installation advice HB PIR 345 NET



- Suitable for material thicknesses of 1 - 3mm.
- Hole diameter for lens 62,5 to 63mm.
- Alignment is done by mechanical positioning (see dimensional drawings).

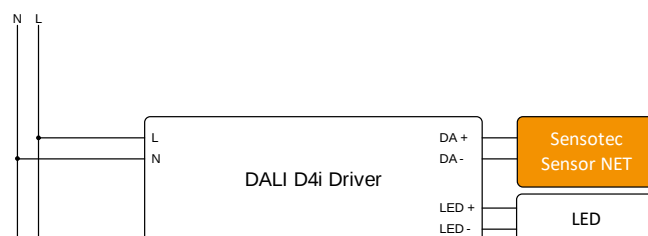
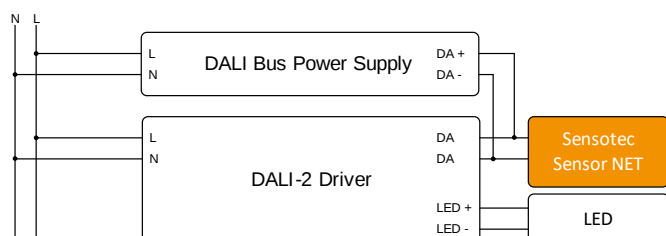


- Clearance of Ø 106mm required for screwing the HB PIR 345 NET Zhaga onto the Zhaga base.

General information

Circuit diagram

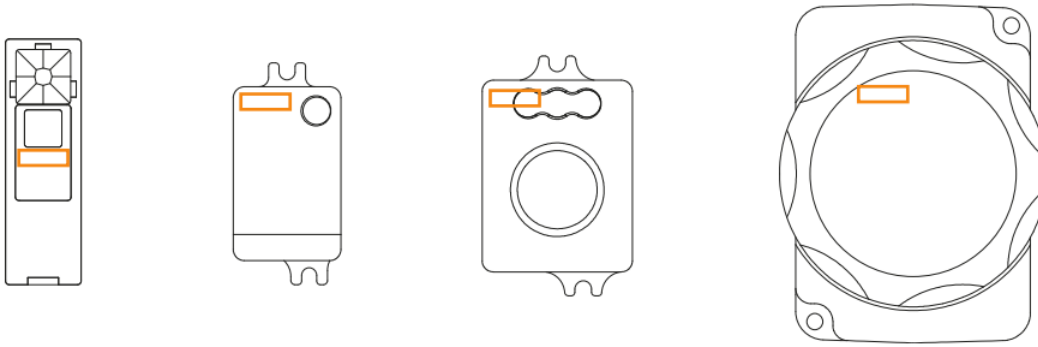
A wiring example with DALI control gear is shown below. If no additional DALI Bus Power Supply is used, the DALI-2 control gear must support at least Part 250 (Integrated bus power supply) and, by way of option, Part 252 (Energy reporting) and Part 253 (Diagnostics & maintenance).



General installation advantages

- Easily clips onto the enclosure (PIR NET)
- Easy to install by means of Zhaga connector system (Zhaga Book 18)
- Easily screws into enclosure
- Connection via a 2-core terminal (except HB Zhaga und Wire)
- The sensor is supplied with power via the two-core DALI bus line
- No plug polarity to observe

Bluetooth antenna locations



Safety precautions

- Electrical devices must only be assembled and installed by qualified electricians.
- Risk of electric shock. Disconnect before attempting work on the unit or load. Take into account all circuit breakers supplying dangerous voltages to the unit or load.
- Risk of electric shock. Before installing the sensor, check the enclosure to make sure it is not damaged. Never open the enclosure.
- The sensor is not suitable for use in burglar alarm systems or other alarm equipment.

Operation and configuration

The sensors are commissioned and configured using the Casambi app:

Casambi App 	Download on the App Store  Link: https://apple.co/3YaLZEN 	GET IT ON Google Play  Link: https://bit.ly/4d49KSH 
---	---	---

Tutorial videos from Casambi are recommended as an introduction: <https://bit.ly/46ak1L1> 

The Casambi App User Guide will help you with details: <https://bit.ly/467ymb0> 

Additional product information

- The feedback LED indicates the following:
 - Fast blinking: Not commissioned.
 - Slow blinking: Connected to a network.
- The device uses the power supply of the DALI bus, the bus must be able to drive at least 50mA.
- The connected ECG (electronic control gears) are controlled with DAPC (direct arc power control) commands in broadcast mode. All sensors are single master application controller and are intended for use with a DALI-2 control gear.
- The Bluetooth range is dependent on the integration of fixtures, surrounding environment and conditions. It is recommended to conduct testing for range accuracy.
- The ambient light sensor measures the average brightness in a room. When comparing measurements using a lux meter directly below the sensor, deviations can occur.

Conformity / marks of conformity



Note

As attenuation and reflections can cause a high-frequency sensor to behave differently in any luminaire, we cannot accept any liability for the sensor not working as expected in the particular luminaire it is being used in. Accreditation can be provided by STEINEL. Please contact your contact person find out what assistance we can give you in designing the sensor module into a luminaire. The customer must also guarantee and take responsibility for the way in which the other components behave in the luminaire (lamp, ECG etc.).

The product is sold under the brand name STEINEL Solutions AG. Software updates are made available regularly. For your own branding and software update approval process, contact our OEM account manager.

This product data sheet provides no guarantee of qualities within the meaning of the statutory warranty provisions for the product described.