

PHILIPS

LRI1668



Product Guide

ActiLume G2 Indus Sensor H513 N

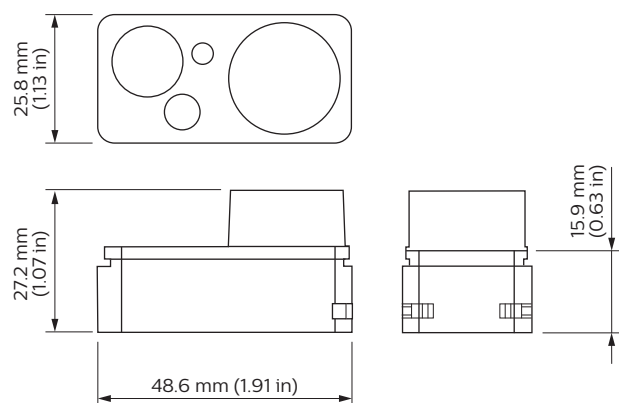
The Philips ActiLume G2 Indus Sensor H513 N is a small, lightweight multisensor designed for integration into luminaires.

The ActiLume G2 Indus Sensor H513 N can be used in combination with the ActiLume DALI gen2 (LLC1663), ActiLume Wireless DALI gen2 (LLC1685) and ActiLume Wireless 1-10V gen2 (LLC1682) controller. The sensor is specifically designed to be used in places with high ceilings such as warehouses; retail shops etc. but can also be applied in office or corridor like applications with high ceilings. The multisensor has a passive infra-red (PIR) receiver for movement detection, an infra-red (IR) receiver for receiving information (commands, settings and/or selection) from, for example, the IRT9090 infra-red remote, a daylight receiver to provide Daylight Dependent Regulation (DDR) and a bi-color LED for indication of sensor powered and motion detection.

Features and benefits

- The Philips ActiLume G2 Indus Sensor H513 N is a luminaire based detector designed for energy savings up to 45%.
- The ActiLume G2 Indus Sensor H513 N consists of three state of the art miniature detectors and when it is combined with a suitable controller, it forms an intelligent lighting solution.
- The light sensor is sensitive for visible radiation (matching the human eye) providing automatic savings with daylight depending regulation, without any visible discomfort for the user.
- The ActiLume G2 Indus Sensor H513 N is connected to the controller by means of a standardized RJ10 (4p4c) connector.
- Factory light level setting is at 250 lux at a reflection factor of 0.2 and the sensor mounted at a height of 10m.

Dimensional drawing



LRI1668 sensor dimensions in mm.

Applications

The ActiLume G2 Indus Sensor H513 N is optimized for high ceiling situations, warehouses and such, but can also be used in for other applications.

Commissioning

The ActiLume G2 Indus Sensor H513 N system can, once it is installed and has been commissioned, work stand alone.

For commissioning the lighting solution (sensor & controller) an extensive infrared user interface (remote control) is available.

- IRT9090 extended IR programming tool (suited for commissioning and configuration).

Philips quality

This ensures quality with respect to:

- System supplier.

- As manufacturer of lamps, electronic control gear and lighting control equipment, Philips ensures that, from the earliest development stage, optimum performance is maintained.
- International standards.
- Philips lighting control equipment complies with all relevant international rules and regulations.

Detection patterns of the sensors



Daylight sensor

The light sensor measures the total amount of light in a circular field of $\approx 80\%$ of the PIR detection area. The following aspects should be observed during installation:

- Minimum distance from the window $\geq 0.6\text{m}$.
- Prevent light reflections from outside entering the sensor (for example sunlight reflection on a car bonnet) as this will lead to incorrect light regulation.

As a guideline the formula $0.72 \times H$ can be used to calculate the minimum distance between the window and sensor whereby H is the height from the bottom of the window to the ceiling.



Infra-Red sensor

The infra-red sensor receives information (RC5 code) from infra-red transmitters, such as the IRT9090, and passes the information on towards the connected controller. The IR sensor is capable of receiving signals under an angle of approximately 15° .

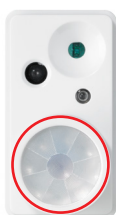


LED indicator

The LED indicator transmits light in two colors:

- Red when movement is detected.
- Yellow when the LRI1668 sensor is functioning correctly but no movement is detected.

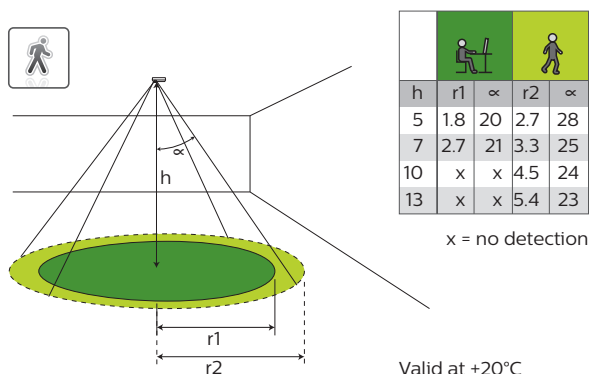
When no light is being transmitted the sensor is not working correctly.



Movement sensor

The detection area for the movement sensor can be roughly divided into two parts:

- minor movement (person moving $\leq 0.9\text{ m/s}$) $\varnothing 5.4\text{ m}$ at 7 m height.
- major movement (person moving $\geq 0.9\text{ m/s}$) $\varnothing 10.8\text{ m}$ at 13 m height.

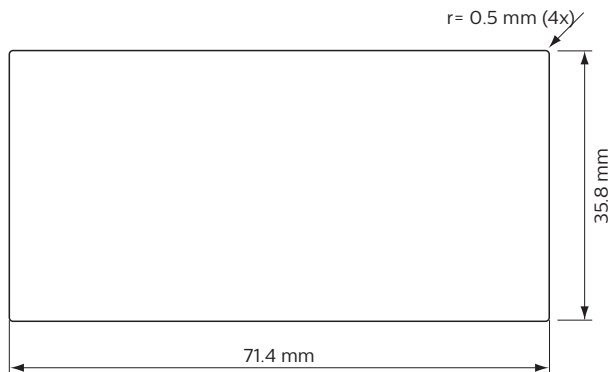


Movement detection pattern diagram

LRI1668 mounting

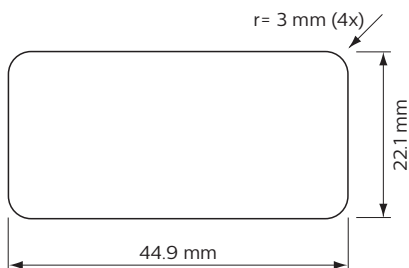
The sensor has latching rills on the back so it can be mounted easily. There are several methods of mounting available:

- Directly onto the lamp by means of an additional clip LCA8002 (TL5) or LCA8003 (TL-D).
- Inside the luminaire housing using the additional clip LCA8007.
To use this clip a hole needs to be cut (punched) according to the dimensions as indicated in figure 1.
- Directly inside the luminaire housing whereby a hole needs to be cut (punched) according to figure 2.



Note: Thickness of fixture material: 0.5 ... 2.0 mm

Figure 1: Cutout (punch) pattern when mounting with clip LCA8007



Note: Thickness of fixture material: 0.5 ... 1.2 mm

Figure 2: Cutout (punch) pattern when using direct mounting



LRI1668 ActiLume G2 Indus Sensor H513 N

Luminaire based high bay multisensor (movement, daylight, infrared) with visual movement indicator. To be used in combination with one of the controllers from the ActiLume gen2 family. Color of the product is white (similar to RAL9016).



LCA8007 mounting clip for ActiLume G2 Indus Sensor H513 N

Mounting clip for the ActiLume G2 Indus Sensor H513 N when the sensor is to be mounted in the luminaire housing. Color of the product is white (similar to RAL9016).



LCA8002 ActiLume sensor clip for TL5

Clip to be used for ActiLume Multi-Sensor, ActiLume Luminaire based extension sensor, ActiLume 1-10V sensor, ActiLume MicroLuxSense and ActiLume G2 Indus Sensor H513 N. With this clip the sensor can be directly clicked on TL5 lamps.



LCA8003 ActiLume sensor clip for TL-D

Clip to be used for ActiLume Multi-Sensor, ActiLume Luminaire based extension sensor, ActiLume 1-10V sensor, ActiLume MicroLuxSense and ActiLume G2 Indus Sensor H513 N. With this clip the sensor can be directly clicked on TL-D lamps.

Specifications

LRI1668

Viewing angle

Light sensor (daylight spectrum)	≈ 50° circular
Movement sensor (passive infra-red)	≈ 55° circular*
Infra-red sensor (RC5 remote code)	≈ 30° circular
Cable length	1 m
Connector type	RJ-10 (4p4c)
Extension of cable allowed	Yes (max 5.0 m)
Power consumption	≤ 12mA at 5VDC
Dimensions (length, width, height)	48.6 x 25.8 x 27.2 mm
With LCA8007	75.5 x 39.9 x 27.2 mm
Weight	34 grams

Housing

Color	White (RAL9016)
Outer material	Sabic lexan 915R
Flame rating	V0 at 1.1 mm
Glow wire test	850° C for ≤ 5 s
Insulation for safety	≥ 1500 V
Ball pressure test	110° C
Surface texture	Spark erosion VDI 3400 Ref. 27

* see table on page 3 for details

Environmental

Operational

Temperature	-20° C ... +55° C
Humidity	20% ... 80% no condensation

Storage

Temperature	-25° C ... +85° C
Humidity	10% ... 95% no condensation
Pollution degree	2
IP protection	IP54 front surface (IP20 rest)

Compliances and approvals

Safety	IEC60598-1 EN 61347-1 EN 61374-2-11
Quality standard	ISO 9001
Environmental standard	ISO 14001

CE marking



Packing data

Type	Box dimensions (mm)	Qty/Box	Material	Weight (Kg)	
				net	gross
LRI1668	200 x 175 x110	12	Cardboard	0.408	0.551
LCA8002	216 x 93 x70	50	Cardboard	0.450	0.455
LCA8003	216 x 93 x70	50	Cardboard	0.450	0.455
LCA8007	215 x 79 x105	25	Cardboard	0.250	0.417

Ordering Data

Type	MOQ	Ordering number	EAN code level 1	EAN code level 3	EOC
LRI1668/05 ActiLume G2 Indus Sensor H513 N	12	9137 003 68503	8718696 487785	8718696 487792	487785 00
LCA8002/00 ActiLume sensor clip for TL5	1	9137 003 40803	8718291 952940	8718291 952957	952940 00
LCA8003/00 ActiLume sensor clip for TL-D	1	9137 003 40903	8718291 952988	8718291 952995	952988 00
LCA8007/05 ActiLume Mntg Clip H513 25 W	1	9137 003 58803	8718291 727927	8718291 727934	727927 00

