PHILIPS

LRM8120

Specification Sheet

LRM8120
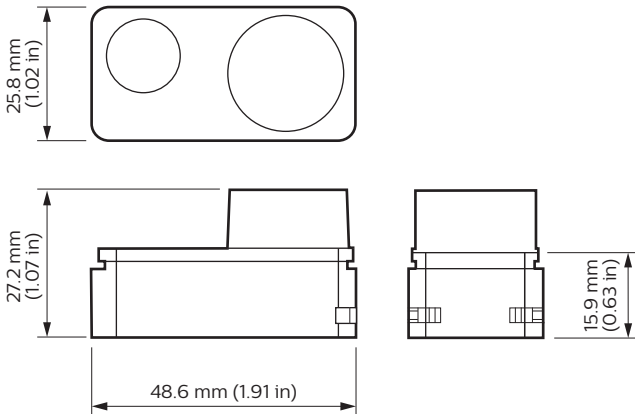# Lum Bas Ind Ext Sensor H513 N

The Philips luminaire based industry extension sensor H513 N (LRM8120) is a small, lightweight sensor designed for integration into luminaires.

The Lum Bas Ind Ext Sensor H513 N can be used in combination with the ActiLume DALI gen2 (LLC1663) controller. The extension 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. The extension sensor uses a passive infra-red (PIR) receiver for movement detection.

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- The Philips Lum Bas Ind Ext Sensor H513 N is a luminaire based detector designed for increasing the detection area of the multi-sensor LRI1663.
- The Lum Bas Ind Ext Sensor H513 N has two flying leads and is connected to the DALI line of the controller.
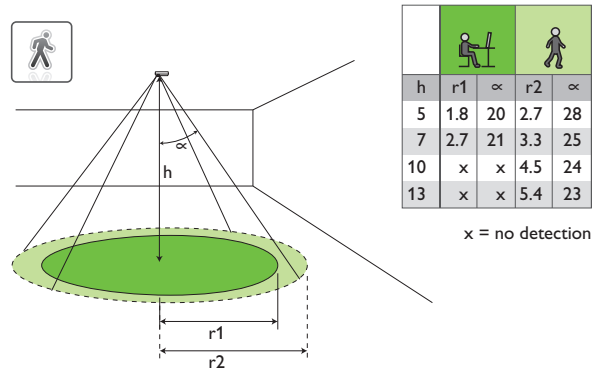- The front of the sensor has an IP65 protection rating.

Movement sensor

The detection area for the movement sensor can be roughly divided into two parts:
- minor movement (person moving ≤ 0.9m/s)
  Ø 5.4m at 7m height.
- major movement (person moving ≥ 0.9m/s)
  Ø 10.8m at 13m height.

Dimensional drawing

25.8 mm (1.02 in)

27.2 mm (1.07 in)

15.9 mm (0.63 in)

48.6 mm (1.91 in)

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h	r1	∝	r2	∝
5	1.8	20	2.7	28
7	2.7	21	3.3	25
10	x	x	4.5	24
13	x	x	5.4	23

x = no detection

Detection pattern diagram (at 20°C ambient)

Applications

The Lum Bas Ind Ext Sensor H513 N is optimized for high ceiling situations, warehouse and such, but can also be used in for other applications.
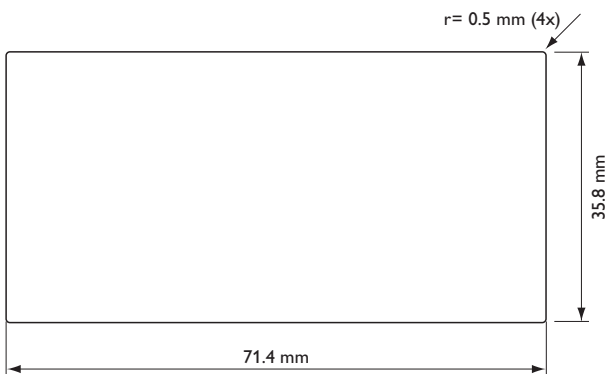
Philips quality

This ensures quality with respect to:
- System supplier
- As manufacturer of lamps, LED's, electronic control gear and lighting control equipment, Signify 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.
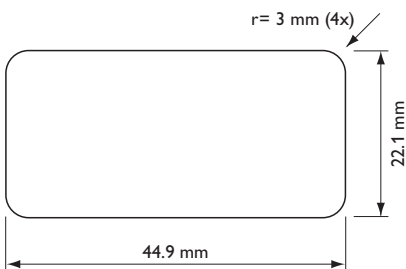
Mounting

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.

r= 0.5 mm (4x)

35.8 mm

71.4 mm

Note: Thickness of luminaire fixture: 0.5 ... 2.0 (mm)

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

r= 3 mm (4x)

22.1 mm

44.9 mm

Note: Thickness of luminaire fixture: 0.5 ... 1.2 (mm)

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

LRM8120 Lum Bas Ind Ext Sensor H513 N
Luminaire based extension sensor to enlarge the movement detection area. 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 multisensor, 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 multisensor, 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

Viewing angle

movement sensor (passive infra-red)	≈45° (circular)*

* see table on page 2 for details

Environmental

Temperature	0 °C to 55 °C (operating) -25 °C to +85 °C (storage and transport)
Relative humidity	20% to 80% non-condensing (operating) 10% to 95% non-condensing (storage and transport)

Compliances and approvals

Protection rating	IP65 front surface (IP20 rest)
Pollution degree	2
Safety	IEC60598-1 EN 61347-1 EN 61374-2-11
Quality standard	ISO 9001
Environmental standard	ISO 14001
	CE

Physical

Dimensions (h x w x d)	48.6 x 25.8 x 27.2 mm (1.9 x 1.0 x 1.1 in)
with LCA8007	75.5 x 39.9 x 27.2 mm (3.0 x 1.6 x 1.1 in)
Weight	34 g
Housing color	white (RAL9016)
outer material	Sabic lexan 915R
flame rating	V-0 at 1.1 mm
glow wire test	850° Celsius for ≤ 5 s
insulation for safety	≥ 1500 V
ball pressure test	110 °C
surface texture	spark erosion VDI 3400 Ref. 27
Cable length	1 m.
Connector type	2 flying leads
Extension of cable allowed	Yes (max 5.0 m)
Power consumption	max 10 mA at 22.5 V

Ordering Data

Type	Ordering number	EAN code level 1	EAN code level 3	EOC
LRM8120/05 Lum Bas Ind Ext Sensor H513 N	9137 003 62903	8718291 789802	8718291 789819	789802 00
LCA8002/00 ActiLume clip TL5 set 50pce	9137 003 40803	8718291 952940	8718291 952957	952940 00
LCA8003/00 ActiLume clip TL-D set 50pce	9137 003 40903	8718291 952988	8718291 952995	952988 00
LCA8007/05 ActiLume Mntg Clip H513 25 W	9137 003 58803	8718291 727927	8718291 727934	727927 00

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