

Light is OSRAM

OSRAM

Product data sheet: QBM D4I LS/PD LI R – Sensor for HubSense®

Qualified Bluetooth mesh sensor
For light harvesting and presence detection
D4I standard

Product family benefits

DiiA D4I certified incl.parts -351
Design freedom due to compact size
Easy to integrate in luminaire
Minimize internal wiring in combination with DEXAL drivers

Areas of application

Open offices
Individual offices
Conference rooms
Classrooms
Storage and break areas
Stairways
Toilets

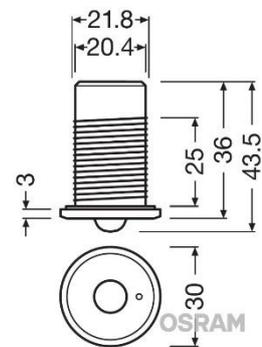
Benefits

Daylight and Occupancy Sensor DEXAL Module
Qualified Bluetooth mesh
Control of D4I drivers or DALI drivers
In compliance with Zhaga Book 20
Works with OSRAM Hubsense
Works with OSRAM DEXAL

Approbations & Certifications

CE, Bluetooth, D4I, SRRC

Housing material: plastic

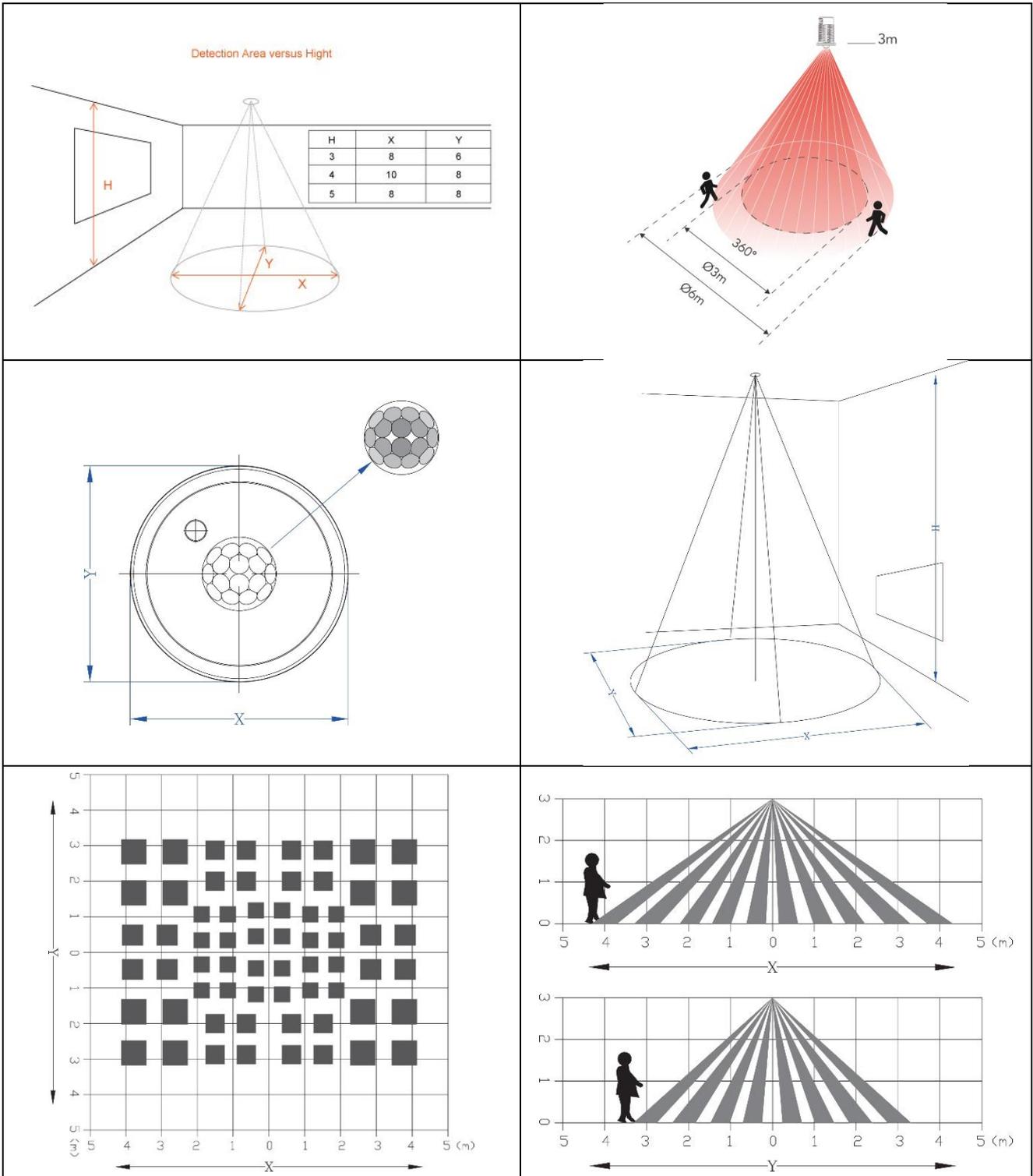
**Product Features**

- Sensor for luminaire integration based on qualified Bluetooth mesh
- D4I controlled
- Stand by power consumption <math>< 150\text{mW}</math>
- 50000 h lifetime at $t_c \text{ max} = 75^\circ\text{C}$
- Installation height up to 5m and +/- 25° beam angle
- Wide detection range up to 8m
- Shield accessory
- 5 years guarantee

Electrical Specifications

	Item	Value	Unit	Remarks
INPUT/ OUTPUT	Rated voltage	12 –22.5	Vdc	According to D4I standard
	Average input current	10	mA	
	Peak input current	30	mA	250 mA max as per DALI standard
	Power Consumption	<150	mW	
	Radio frequency	2.4	GHz	
	Max Tx Power	+4	dBm	2.512 mW
	Wireless protocol			Qualified Bluetooth mesh provided by SILVAIR
	Range	10	m	Line of sight
CAPABILITIES	Control	D4I		
	Number of connected drivers	4		D4I LED drivers
	Type of sensor			PIR and light sensor
	Detection angle	+/- 25°		50% lux detection
	Mounting heights	5	m	Maximum
	Installations			Luminaire integration and false ceilings
	PIR detection range	6 8	M m	@3m height 20- 35 °C; <75% relative humidity @5m height
	Detection angle	360	°	
	Light measurement	5-1000	lux	lux with daylight harvesting function (β -angle: $\pm 25^\circ$),
	Reset			Magnet
LEDs indicator			Blue x 1, Red x 1 (pairing, connected & etc. indications)	
ENVIRONMENT	Ambient temperature range t_a	-20 ... +50	°C	PIR performance @35° are reduced
	Maximum case temperature t_c	60	°C	(50,000 hrs lifetime at max. $T_a = 50^\circ\text{C} / T_c = 60^\circ\text{C}$)
	Max. case temp. in fault condition	110	°C	
	Storage temperature range	-20 ... +70	°C	
	Operating humidity	0 ... 90	%	
	Storage humidity	0 ... 95	%	Not condensing
	Environmental rating	Indoor		
	IP rating	IP 54		Gasket included
DIMENSIONS AND WEIGHT	Expected lifetime	50'000	h	$T_a=50^\circ\text{C}$ or $T_c=60^\circ\text{C}$
	Screw thread length	25	mm	
	Length	43.5	mm	
	Diameter internal	21.8	mm	
	Diameter external	28	mm	
	Protrusion	3	mm	With PIR 7.5 mm
	Mounting hole diameter	22 – 23	mm	
	Product weight	130	g	
	Wire preparation length, input side	7 ... 9	mm	22...18 AWG
Cable cross section, input side	0.25...0.75	mm ²		
Maximum allowed cable length	10	m		
STANDARDS	CE			
	LVD: EN61347-2-11			
	EMC: EN 301 489-1 EN 301 489-17 EN 50581 EN 62479 EN 300 328			
	DALI 2: EN IEC 62386-101, EN IEC 62386-103 and D4i Part 351			
	RoHS & REACH compliance			
	SRRRC			

Detection range



Ordering Information

Product type	EAN10
QBM D4I LS/PD R	4052899627154

Additional product information

- By integrating the device into a casing, the wireless range could be affected by metal surfaces. Therefore, the wireless range needs to be verified after integration.
- The device could be reset to factory default by magnet (cfr User Instruction)
- The status LED of the device indicates following Network status
 - Blue LED Indicator:
 - Success connection: LED indicator flashes 2s at once
 - No connections: LED indicator flashes 0.3s at once
 - Reset to factory settings:
 - LED indicator flashes 1s at once, then quickly flashes and disappears
 - Red LED Indicator:
 - Warm up: LED indicator disappears after 60s
 - When PIR is triggered, the LED indicator quickly flashes at once; continuous triggered, LED indicator flashes every 1s at once
- The device has passed successfully the SILVAIR Testing process.
- The device can be put into operation using the OSRAM HubSense Commissioning Tool (<https://platform.hubsense.eu>), subject to prior acceptance of the Terms of Use and the Privacy Policy.
- OSRAM may terminate or suspend the use of the HubSense Commissioning Tool at any time and for any or no reason in its sole discretion, even if access and use is continued to be allowed to others.
- The device complies with Bluetooth mesh Standard v1.0. It can also be used in 3rd party Bluetooth mesh network, that complies with this standard and that supports the mesh models of this device, and with certain 3rd party commissioning tools, that support the mesh models of this device. In order to ensure correct interoperability a verification with the 3rd party network components and the 3rd party commissioning tool is necessary in advance. Please contact OSRAM (support@hubsense.eu) to receive the actual list of supported models for this device.
- OSRAM shall have no liability for any 3rd party commissioning tool and does not make any representations, express or implied, about the availability and/or performance of such commissioning tool.
- OSRAM shall have no liability for and does not make any representations, express or implied, about the connectivity of OSRAM qualified Bluetooth mesh products with any other products, that have passed the SILVAIR Testing process

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