

QBM D4i PD P Z – PIR outdoor Sensor for HubSense®

Qualified Bluetooth Mesh device

For presence detection in outdoor
D4I standard

Product family benefits

DiiA D4I certified incl. parts -351
Design freedom due to compact size
Easy to integrate in luminaire

Areas of application

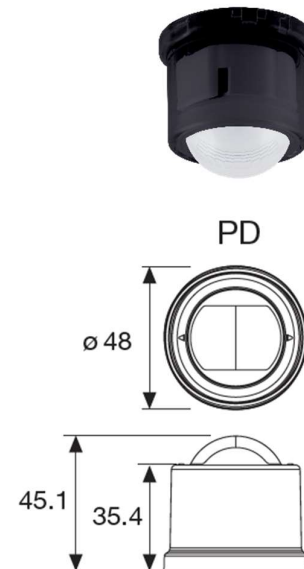
Cycle lanes
Parking area
Urban squares

Benefits

Light control of outdoor application
Std socket Zhaga Book 18
Control of D4I drivers or DALI drivers
Works with HubSense
Works with OSRAM DEXAL

Approval marks

CE, (SRRC), Bluetooth mesh, D4I,
Housing material: plastic material, smoke grey



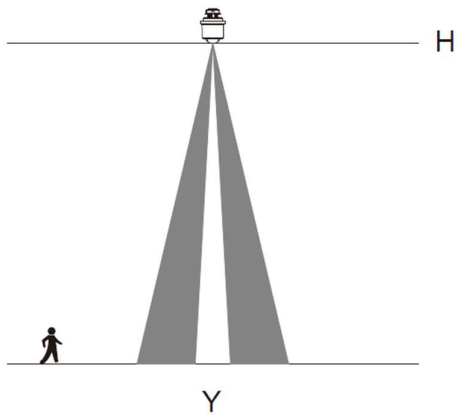
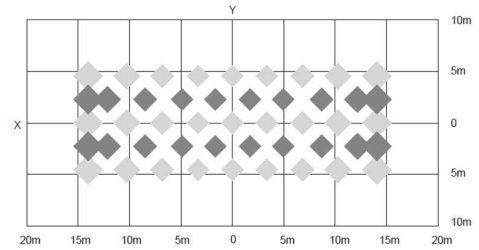
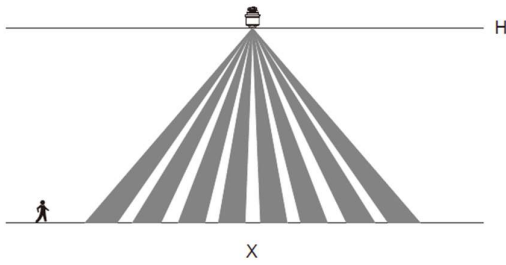
Product Features

- Sensor for luminaire integration based on qualified Bluetooth mesh
- Sensor detection range 10 x 30 m
- D4I controlled (energy reporting, diagnostic and maintenance)
- Stand by power consumption <150mW
- 50000 h lifetime at tc max = 60°C
- Installation height for head poles up to 15m
- IP grade IP66
- Wide connection range up to 50m
- Socket compliant to ZhagaBook 18
- 5 years guarantee

Electrical Specifications

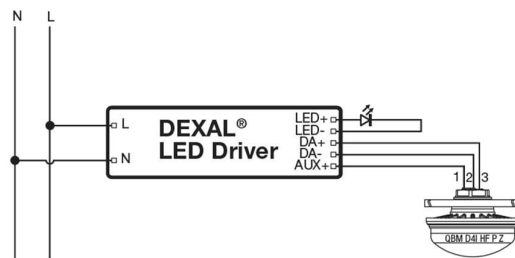
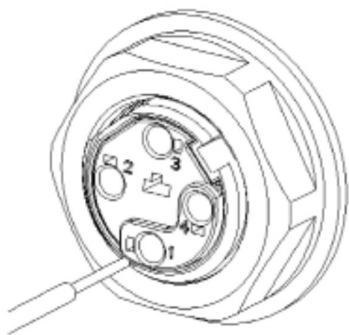
	Item	Value	Unit	Remarks
INPUT	Rated voltage	12 – 22.5	Vdc	PIN 2 (DA-) PIN 3 (DA+)
	Average input current	10	mA	
	Peak input current	30	mA	
	Standby power	<150	mW	Stand by power
	Radio frequency	2.4 – 2.483	GHz	
	Max Tx Power	+8	dBm	4.484 mW
	Wireless protocol			Qualified Bluetooth mesh provided by SILVAIR
	Range	40-50	m	Line of sight
CAPABILITIES	Control	D4I		DALI parts: 101, 103, 351
	Number of connected drivers	4		D4I LED drivers
	Type of sensor			PIR
	Mounting heights	10-15	m	
	Installations			In Luminaire
	PIR detection range	30 x 10	m	@ 15m installation heigh
	PIR detection angle	90	°	See table
	Light measurement			N/A
	Reset			Magnet – see instruction manual
	LEDs indicator			Blue x 1, Red x 1 (pairing, connected & etc. indications)
ENVIRONMENT	Ambient temperature range t_a	-20 ...+60	°C	
	Maximum case temperature t_c	65	°C	(50,000 hrs lifetime at max. $T_a = 50^{\circ}\text{C} / T_c = 60^{\circ}\text{C}$)
	Storage temperature range	-20 ...+70	°C	
	Operating humidity	0 ... 95	%	(Tbc)
	Storage humidity	0 ... 95	%	Not condensing
	Environmental rating	outdoor		
	IP rating	IP 66		Socket included (tdb)
	Expected lifetime	50'000	h	$T_c=65^{\circ}\text{C}$
	Diameter external	48	mm	
	Heigh	45 mm	mm	
	Product weight	70	g	
	Wire preparation length, input side	7 - 9	mm	Poke in connectors
	Maximum allowed cable length	10	m	For trunking systems
	STANDRDS	CE LVD: EN61347-1 EN61347-2-11 EMC: EN 301 489-1 EN 301 489-17 EN51547 EN 55015 EN 50663 EN 300 328 DALI 2: EN IEC 62386-101, EN IEC 62386-103 and D4i Part 351 RoHS & REACH compliance		
SRRC				

Detection range



Temperature difference*	H	X	Y
2°C	10m	20m	8m
4°C	15m	30m	10m

Connection



Zhaga Book 18 – socket

Pin 1	+24 V
Pin 2	24V gnd / DA (-)
Pin 3	DA (+)

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 HubSense Commissioning Tool (<https://platform.hubsense.eu>), subject to prior acceptance of the Terms of Use and the Privacy Policy.
- Inventronics 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 Inventronics (support@hubsense.eu) to receive the actual list of supported models for this device.
- Inventronics 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.
- Inventronics shall have no liability for and does not make any representations, express or implied, about the connectivity of Inventronics qualified Bluetooth mesh products with any other products, that have passed the SILVAIR Testing process

ordering information

Product name	EAN10
QBM D4I PD IP6 ZB18	4055462432759

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