

Z-SENSOR-MB Z-SENSOR-HB

2.4 GHz Wireless integrated Lighting Controller and Sensor

Multisensore wireless Mesh Network 2.4 GHz compatibile BLE/Zigbee. Gestisce in regolazione e potenza fino a 32 driver standard DALI o 1/10V, uscita relè normalmente chiusa (NC) da 500VA. Sensore di luminosità e movimento Mid Bay (Hmax 10m - FOV 108°) ed High Bay (Hmax 17m - FOV 69°). Antenna integrata. Alimentazione autosensing da 230Vac oppure da linea DALI secondo le specifiche DALI-2 D4i. IP54.

2.4 GHz Mesh Network wireless multisensor BLE/Zigbee compatible. Manages in regulation and power up to 32 standard DALI or 1/10V drivers, 500VA normally closed (NC) relay output. Mid Bay (Hmax 10m - FOV 108°) and High Bay (Hmax 17m - FOV 69°) light and motion sensor. Integrated antenna. utosensing power supply between 230Vac or DALI bus according to D4i DALI2 specification. IP54.



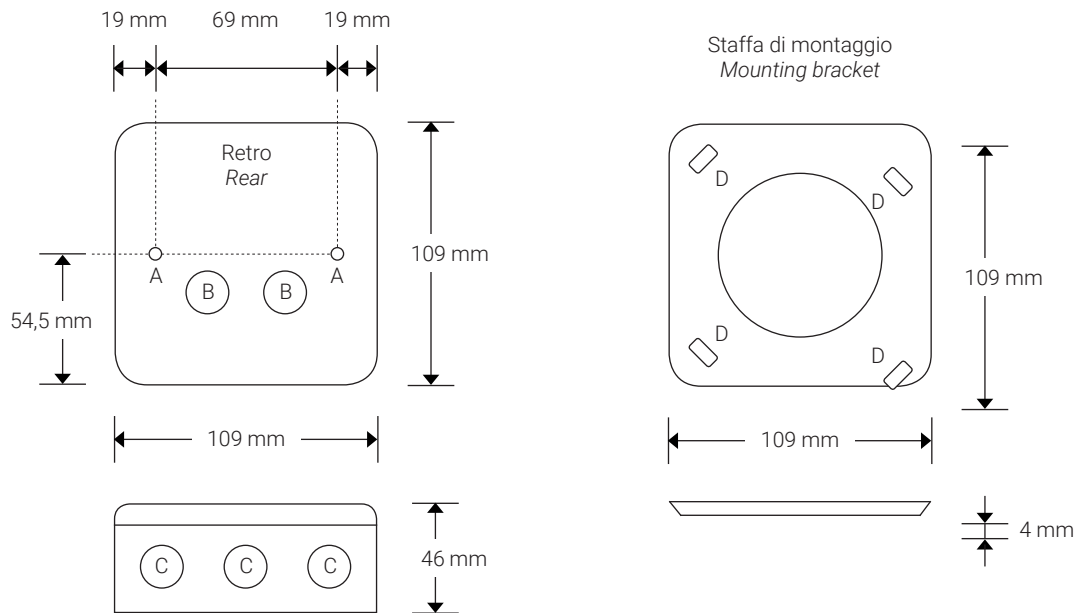
Modelli | Models

Model	Code	Description
Z-SENSOR-MB	ZQ16-00R0	2.4 GHz Wireless integrated Controller and Sensor - Mid Bay version (Hmax 10m - FOV 108°)
Z-SENSOR-HB	ZQ16-01R0	2.4 GHz Wireless integrated Controller and Sensor - High Bay version (Hmax 17m - FOV 69°)

Specifiche tecniche | Technical specifications

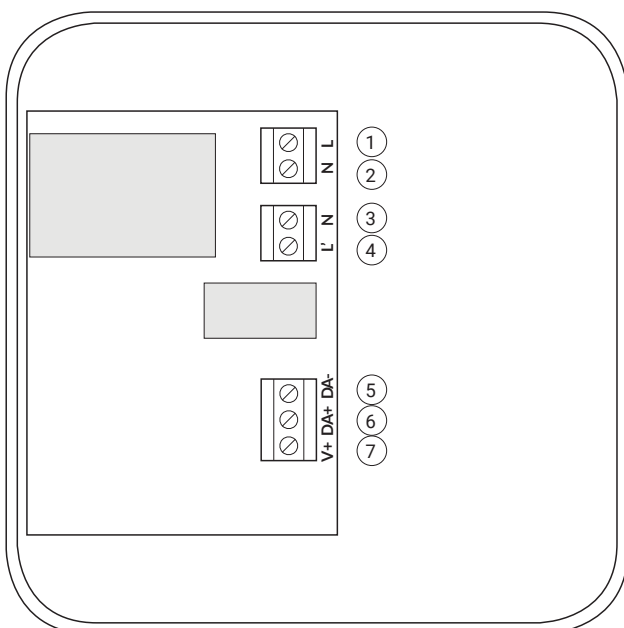
Input power	Auto sensing between: <ul style="list-style-type: none">Mains 85-305 Vac 47-63 Hz, max 2WDALI bus according to D4i specification, max 0.8W
2.4 GHz Bluetooth radio interface	Bluetooth LE. Output power +10 dBm. Transmission range 10 m line-of-sight. <i>BLE and Zigbee are active at the same time.</i>
2.4 GHz Zigbee radio interface	Zigbee Home Automation protocol. Output power +10 dBm. Transmission range 20 m line-of-sight, extension by Mesh Network. <i>BLE and Zigbee are active at the same time.</i>
Relay output	Normally closed. Rated power 500VA. Mechanical endurance 10 ⁶ ops. Electrical endurance 10 ⁵ ops
Dimming output	Analog 1/10V: max 32 driver. Digital DALI (powered): max 32 driver
DALI interface	Control up to 32 DALI, DALI-2 and D4i drivers: <ul style="list-style-type: none">Light level: broadcastDiagnostic and D4i parameters: addressed
Movement sensor MB (Mid Bay) version	Passive InfraRed, Hmax 10m - FOV 108°
Movement sensor HB (High Bay) version	Passive InfraRed, Hmax 17m - FOV 69°
Light sensor	Range 5 lux to 500 lux (direct). Maximum recommended height for "closed loop" control 10-12m
Diagnostic LED	Power/Activity
Connector block	Screw terminals. Wire cross section 0,5-2,5 mm ² (max AWG13)
Input-output insulation	4 kV
Operating Environment	Ambient temperature (ta) -10°C to +65°C. Relative humidity 10% to 90% Max. housing temp. (tc) 70°C. Storage -30°C to +80°C
Housing	Plastic IP54
Dimensions	109 x 109 x 50 mm
Weight	230 g
Standards & Legislation	Approvals RED 2014/53/EU. EMC directive 2014/30/EU. LV directive 2014/35/EC. RoHS II directive 2011/65/EU, 2015/863/EU. WEEE directive 2012/19/EU Safety EN 61347-1: 2015; EN61347-2-11: 2001 EMC EN 61000-3-2: 2014; EN 61000-3-1: 2013; EN55015: 2013/A1: 2015; EN 61547: 2009 ETSI EN 300-220-2 V3.1.1, ETSI EN 301-489-1 V2.1.1; ETSI EN 301-489-3 V2.1.1

Dimensioni | Dimensions



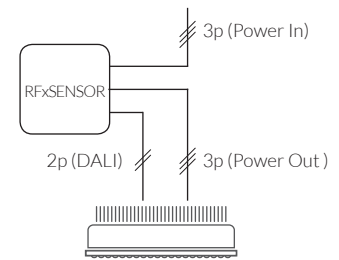
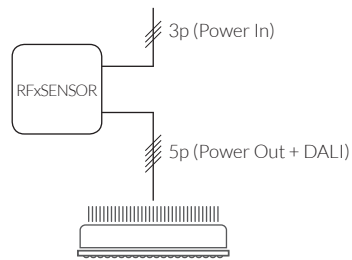
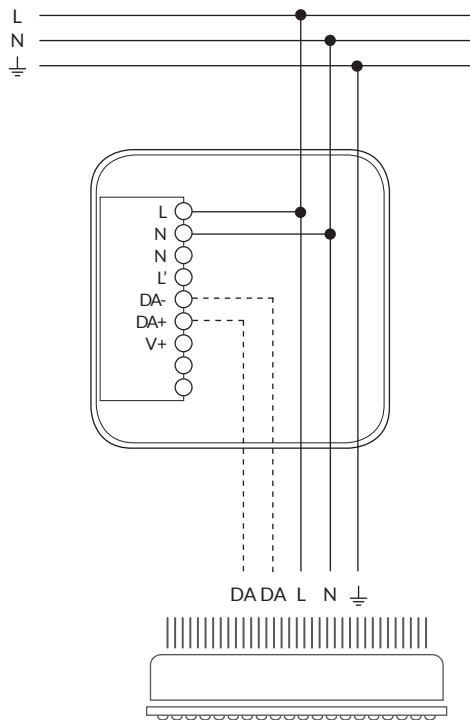
A	Ø 3 mm	Foro cieco per aggancio staffa di terze parti <i>Blind hole for hooking a third-party bracket</i>
B	Ø 21 mm	Predisposizione per foro compatibile con tappo in gomma (IP54) o pressacavo PG13.5 (IP65) <i>Predisposition for hole compatible with rubber plug (IP54) or cable gland PG13.5 (IP65)</i>
C	Ø 21 mm	Foro con tappo in gomma (IP54, incluso), compatibile con pressacavo PG13.5 (IP65, non incluso) <i>Hole with rubber plug (IP54, included), compatible with PG13.5 cable gland (IP65, not included)</i>
D	Ø 4 mm	Foro per fissaggio della staffa di montaggio <i>Hole for fixing the mounting bracket</i>

Connessioni | Wiring



1	L	Power Input (Line)
2	N	Power Input (Neutral)
3	N	Power Output (Neutral)
4	L'	Power Output (Line)
5	DA-	DALI or 1/10V dimming -
6	DA+	DALI dimming +
7	V+	1/10V dimming +

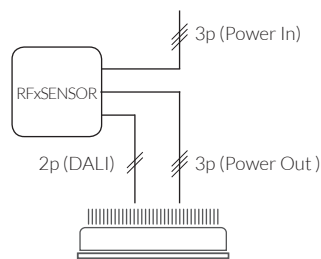
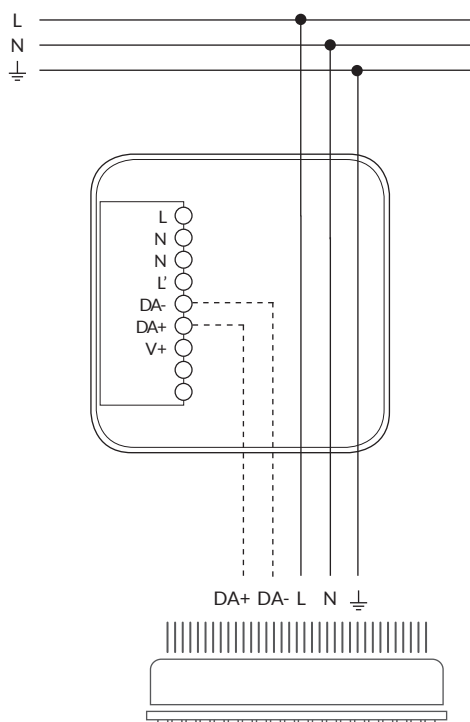
Cablaggio apparecchi DALI | DALI luminaires wiring



Sezione cavo DALI DALI cable section	Lunghezza max DALI DALI max lenght
0,5 mm ²	0 - 100 m
0,75 mm ²	100 - 150 m
1,5 mm ²	150 - 300 m

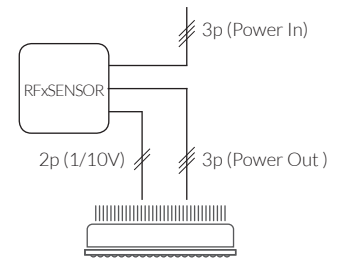
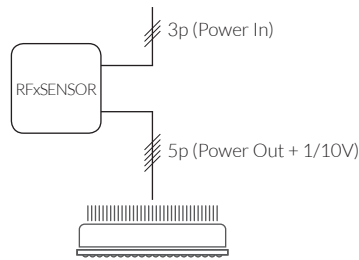
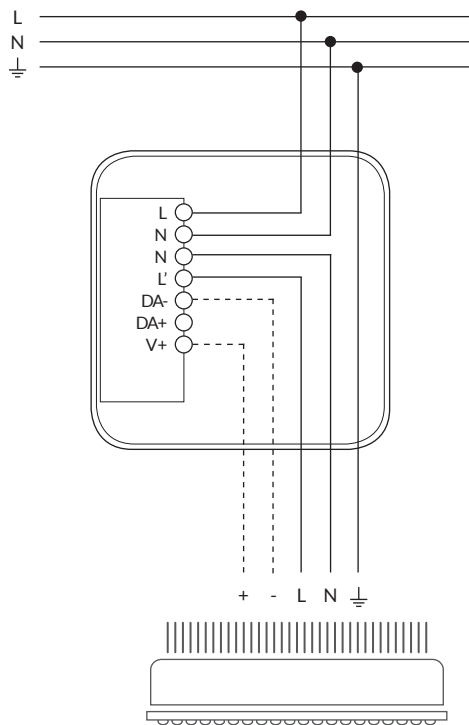
Cavo non schermato nè twistato (normale tipo per alimentazione).
Not shielded and not twisted cable (mains rated).

Cablaggio apparecchi DALI-2 D4i | DALI-2 D4i luminaires wiring



Cavo non schermato nè twistato (normale tipo per alimentazione).
Not shielded and not twisted cable (mains rated).

Cablaggio apparecchi 1/10V | 1/10V luminaires wiring



Sezione cavo 1/10V 1/10V cable section	Lunghezza max 1/10V 1/10V max lenght
> 0,5 mm ²	100 m Cavo 5 poli 5 pole cable
1,5 mm ²	< 300 m Cavo 2 poli dedicato al segnale 1/10V 2 pole cable dedicated for 1/10V signal

Cavo non schermato nè twistato (normale tipo per alimentazione).
Not shielded and not twisted cable (mains rated).

Sensore di movimento | *Motion sensor*

Prestazioni del sensore riferite a temperatura ambiente di 25°C ed oggetti di dimensioni 70x25 cm (corpo umano) in movimento alla velocità di 1.0 m/s:

- Altezza massima 10m (MB) e 17m (HB) con differenza di temperatura tra il target e lo sfondo di almeno 4°C.
- Zone di rilevazione all'interno del campo visivo: 92 (MB), 128 (HB).

NOTE

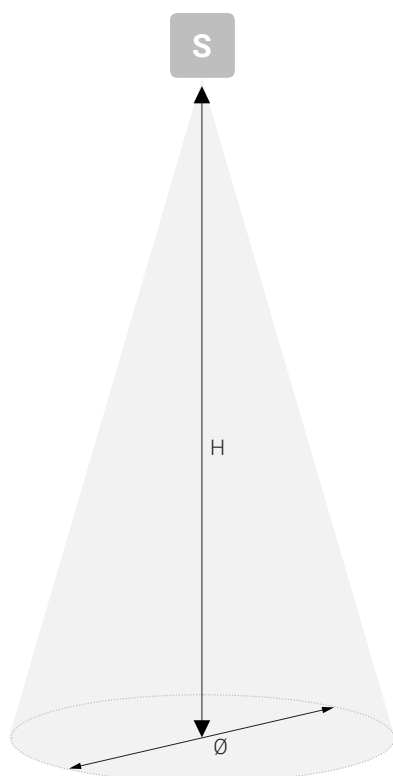
- Temperatura ambiente utilizzabile -20°C..+55°C (non utilizzare in presenza di ghiaccio o condensa).
- Tempo necessario alla stabilizzazione del segnale 30 sec. dallo start-up.

Sensor performance referred to ambient temperature of 25 ° C and objects of size 70x25 cm (human body) moving at a speed of 1.0 m/s:

- Maximum height 10m (MB) and 17m (HB) with temperature difference between the target and the background of at least 4 ° C.
- Detection zones within the field of view; 92 (MB), 128 (HB).

NOTES

- Usable ambient temperature -20 ° C .. + 55 ° C (do not use in the presence of ice or condensation).
- Time required to stabilize the signal from the start-up 30 sec.



Area di rilevamento Detection Area		
Altezza di installazione Installation height	Z-SENSOR-MB (Mid Bay)	Z-SENSOR-HB (High Bay)
H	Ø	Ø
3 m	8,3 m	4,1 m
4 m	11,0 m	5,5 m
5 m	13,8 m	6,9 m
6 m	16,5 m	8,2 m
7 m	19,3 m	9,6 m
8 m	22,0 m	11,0 m
9 m	24,8 m	12,4 m
10 m	27,5 m	13,7 m
11 m	-	15,1 m
12 m	-	16,5 m
13 m	-	17,9 m
14 m	-	19,2 m
15 m	-	20,6 m
16 m	-	22,0 m
17 m	-	23,4 m