

Z-PLUG Z-PLUG-SENSOR

Wireless controller and multisensor for integration in office luminaires



Wireless 2.4 GHz mesh network controller, motion and light sensor for integration inside luminaires for office applications.

Main features

- Supply from 12-15Vdc or via DALI bus from D4i driver
- Wireless 2.4 GHz mesh network, compatible to Bluetooth LE and Zigbee 3.0
- Manage up to 4 DALI drivers
- Presence and motion sensor
- Ambient light sensor
- IP20 protection degree

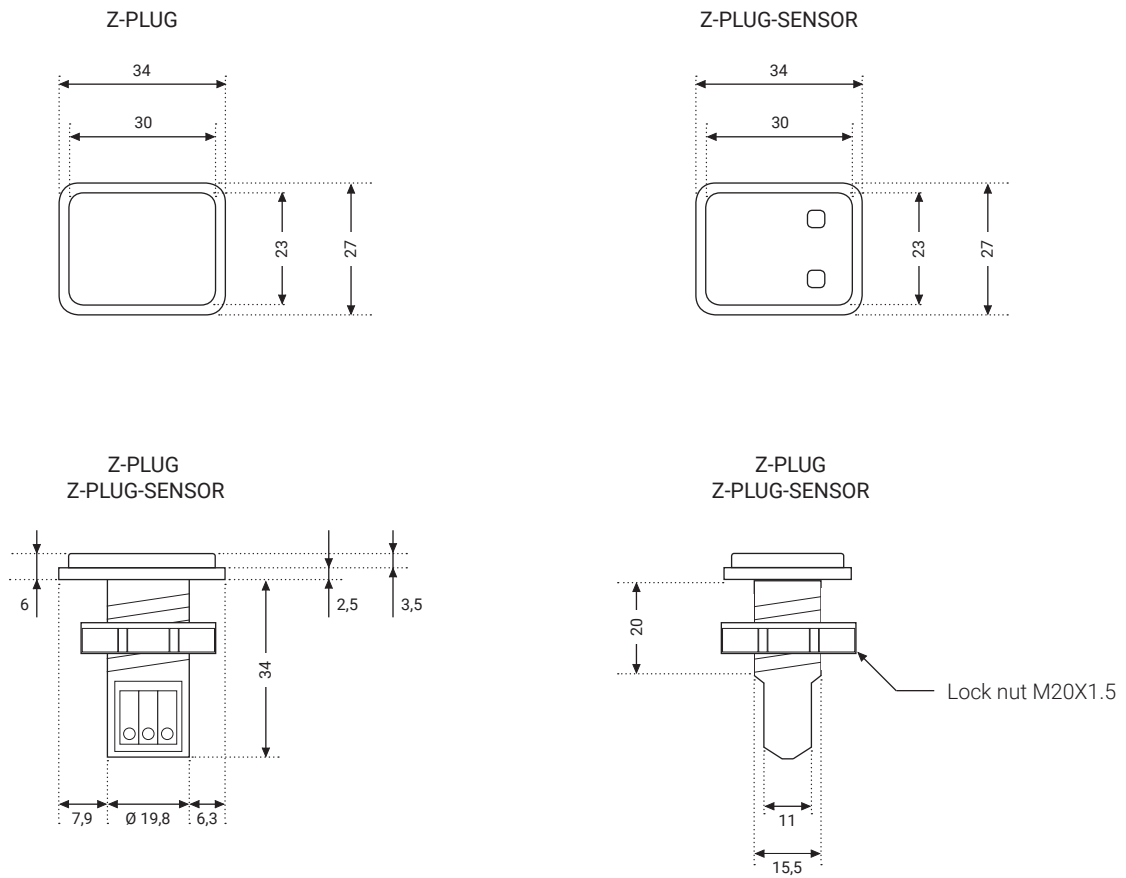
Models

Model	Code	Description
Z-PLUG	ZQ25-02R0	Wireless 2.4 GHz mesh network controller for integration in office luminaires
Z-PLUG-SENSOR	ZQ25-03R0	Wireless 2.4 GHz mesh network multisensor for integration in office luminaires

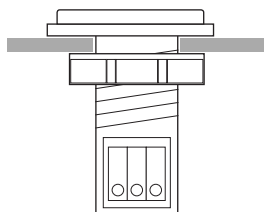
Technical specifications

Input power	Auto sensing between: <ul style="list-style-type: none">• 12...15 Vdc from dedicated power supply• 12...22,5 Vdc from DALI bus according to D4i specification (DALI-2 part 250)
Input current	Peak 50 mA - Average 20 mA
Power	System 0,6 W - Stand-by < 0,3 W
Radio transceiver	Operating frequencies: 2.402 GHz – 2.480 GHz Max output power: +10 dBm
Radio protocols	Bluetooth LE & Zigbee Home Automation, active at the same time
DALI interface	Control up to 4 DALI, DALI-2 and D4i drivers: <ul style="list-style-type: none">• Light level: broadcast• Diagnostic and D4i parameters (DALI-2 part 251, 252, 253): addressed When powered from 12..15Vdc the DALI bus is powered
Diagnostic LED	Power/Activity
Presence and motion sensor (only Z-PLUG-SENSOR)	High-sensitivity infrared (IR), FOV 80°, reach up to 4 m for objects measuring 70 x 25 cm ² Capable of detecting stationary objects (presence) and moving objects
Light sensor (only Z-PLUG-SENSOR)	Range 5 lux to 500 lux (direct). Maximum recommended height for "closed loop" control 10-12m
Connector block	Push-in terminals. Wire cross section 0,2 - 0,75 mm ² (AWG24 - AWG18), stripping 7 mm
Operating Environment	Ambient temperature (ta) -10°C to +60°C. Relative humidity 10% to 90% Max. housing temp. (tc) 65°C . Storage -20°C to +70°C
Housing	Plastic IP20
Dimensions	34 x 27 x 34 (inside luminaire) x 6 (outside luminaire) mm
Weight	15 g
Standards & Legislation	RED (Directive 2014/53/UE): EN 300328, EN 62311 SAFETY: EN 61347-1, EN61347-2-11 EMC: EN 61000-3-2, EN 61000-3-3, EN 55015, EN 61547, EN 301489-1, EN 301489-17 Environment: WEEE and RoHS directives

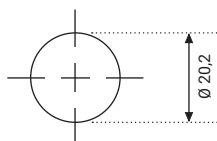
Dimensions (mm)



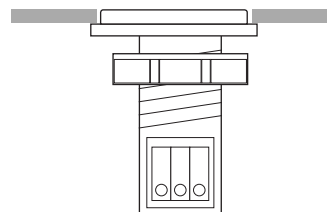
Installation from outside to inside



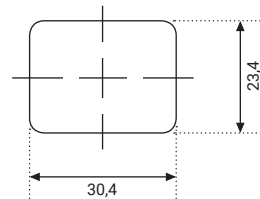
Mounting hole on luminaire housing



Installation from inside to outside

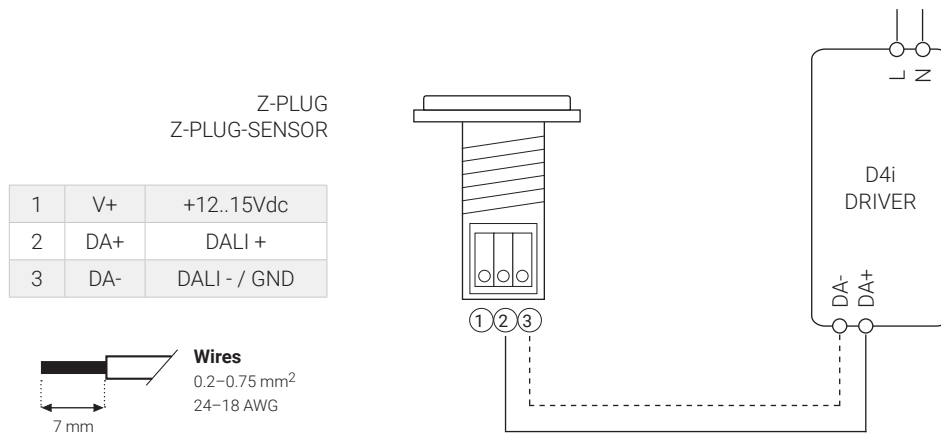


Mounting hole on luminaire housing

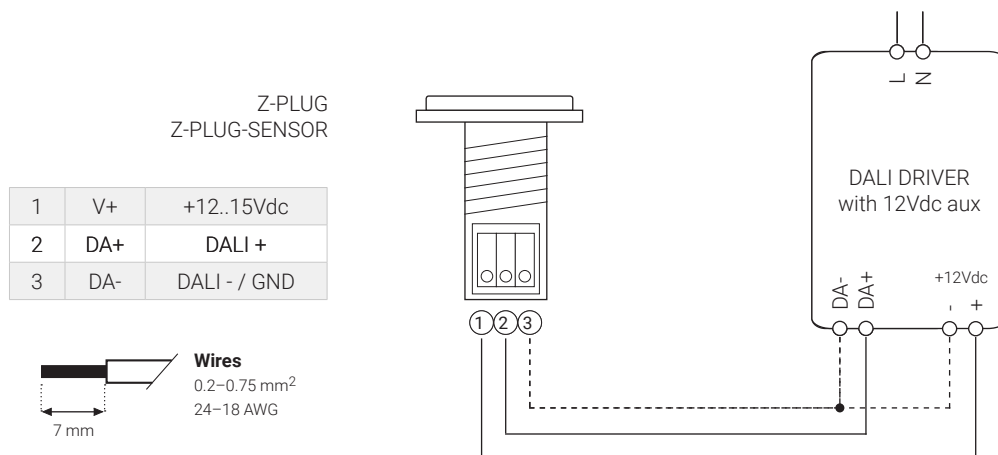
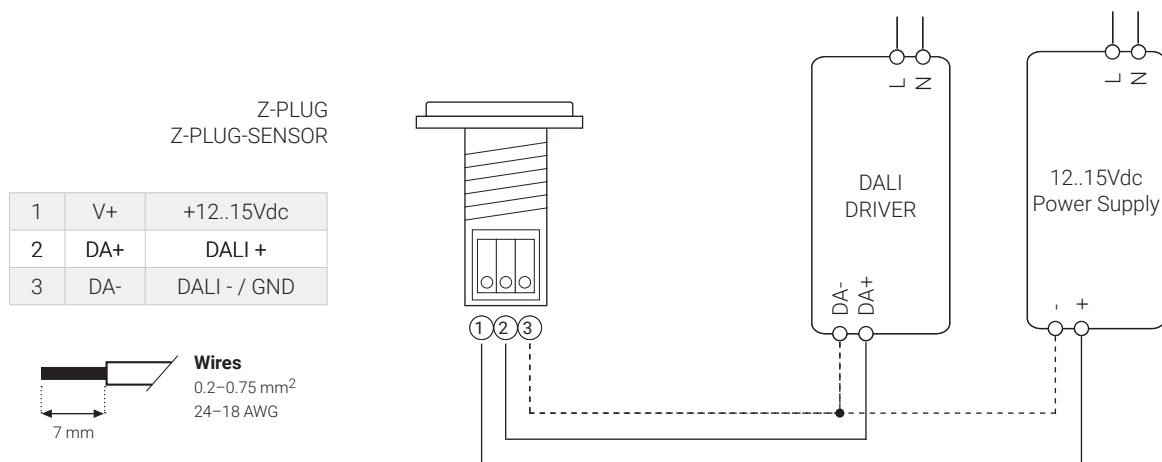


Wiring diagram

Connection of the control module to a D4i drivers



Connection of the control module to a standard DALI drivers



Presence and motion sensor

High-sensitivity infrared (IR), FOV 80°, reach up to 4 m for objects measuring 70 x 25 cm² referred to ambient temperature of 25°C.
The sensor is capable of detecting stationary objects (presence) and moving objects.

The sensor have not be located in the immediate vicinity of a warm air current, because that can trigger the motion detection.

