

MOTION SENSOR 360 - KNX

M360-W-KNX (WHITE) ----- M360-B-KNX (BLACK)



FARADITE

OVERVIEW



With just a 49mm diameter, the Faradite Motion Sensor 360 - KNX is a remarkably small KNX motion sensor with an integrated brightness sensor and huge set of functions. The sensor can have up to 4 independent functions each with independent timeouts and configuration parameters. (see features on page 2)

TECHNICAL DATA

Operating Voltage	21-31V DC SELV (KNX Bus)
KNX Medium	TP1-256
Power Consumption	10mA @ 30V DC
Sensors	Motion (PIR), Brightness
Brightness sensor measure range	0 - 2000lx
Operating temperature	0-45 °C (indoor clean environment)
Storage	-5 - 45°C
Transport	-25 - 70°C
Wire Gauge	18-20 AWG
Pollution degree	PDII
Weight	23g
Operating Humidity	5% - 95%
Storage Humidity	5% - 95%
IP rating	IP20
Protection class	III
Range	5M
Max mounting height	3m (for optimal performance)
Installation hole	35mm(40mm Fire IDR)
Push-fit connector	Wago 243-211

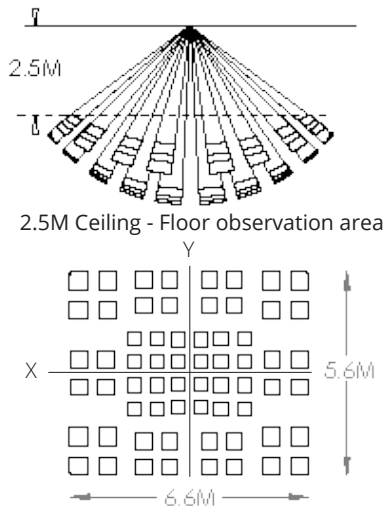
OBSERVATION AREA

The following conditions have to be met to detect motion:

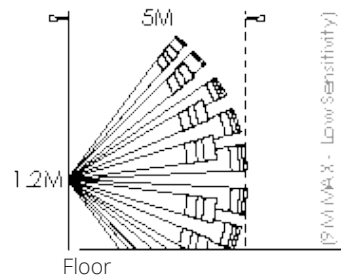
1. Movement speed: 1.0m/s
2. Target concept is a human body (Min object size: ~700×250mm)
3. The temperature difference between the target and the surroundings must be greater than 4 °C.

The sensor can be installed horizontally or vertically.

Horizontal Installation



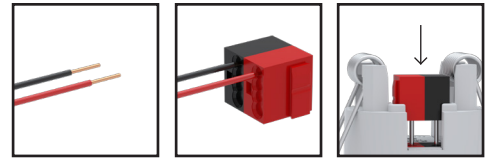
Vertical Installation



ELECTRICAL CONNECTIONS

KNX cable must be used to connect the motion sensor to the installation.

- 1: Strip the red and black KNX cable cores back to 6mm copper
- 2: Push into Wago terminals
- 3: Align and push the Wago connector onto the pins.
- 4: To remove - pull connector upwards.

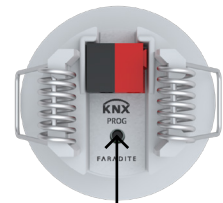


POWER SUPPLY

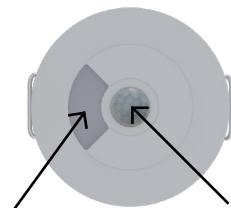
Only certified KNX power supply can be used. Power supply must have short circuit protection.

KNX PROGRAMMING BUTTON

The KNX Programming button is located on the back of the sensor. Use a small screw driver to push the button. The light window on the front of the sensor will glow red when in programming mode.



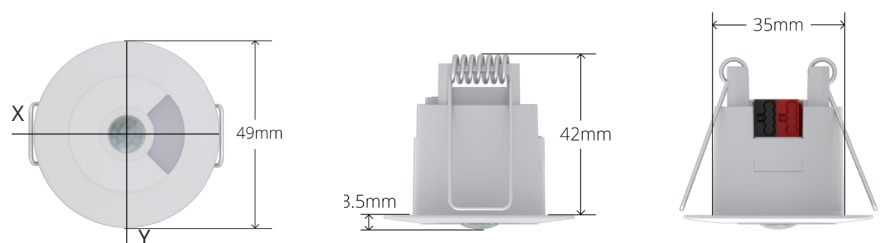
Programming Button



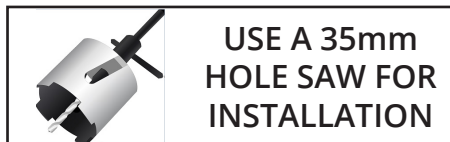
Brightness Sensor (Panel glows red during programming)

Motion Sensor

DIMENSIONS



INSTALLATION



To install the Faradite Motion Sensor 360 - KNX, cut a 35mm / 1 1/2" hole using a suitable hole saw. Fold the spring clips upwards and push through the hole. If you are using the optional Fire IDR to achieve a 60 minute fire rating to BS 476: Part 21 1987, then a 40mm hole will be required (UK Only).

MOUNTING & SAFETY PRECAUTIONS

1) Do not under any circumstance use the device outside the range of their ratings shown in the technical data.

2) Faradite is committed to making products of the highest quality and reliability. Nevertheless, all electrical components are subject to natural deterioration, and the product durability will depend on the operating environment and conditions of use.

3) Please note that the motion sensor can detect heat sources other than the human body, such as:

a) Small animals

b) Direct sun light, incandescent lamps, car headlights (even if the heat source is outside the detection area)

c) Sudden temperature change inside or around the detection area i.e. hot or cold winds/drafts or vapour from a humidifier can affect the performance of the motion sensor.

4) Please note that the motion sensor will have difficulty sensing the heat source if it is behind glass, acrylic or similar materials, as these materials may not allow a correct transmission of infrared rays.

FEATURES

Tiny, flush mounted PIR sensor

- Just 49mm diameter for ultra discreet KNX motion detection
- 35mm hole for installation

4 independent functions each with independent parameters

6 function types

- Switching,
- Dimming value,
- Scenes,
- HVAC
- Advanced value sending, with 10 different object types
- Constant light control

Constant light control / Daylight harvesting

- Teach in brightness setpoint group object
- Constant light control standby dimming level function
- Support for manual interaction via 4 bit telegrams

Day / Night functionality

- Set different timeout, brightness threshold / set point and values to send on motion and timeout depending on time of day

Master / Slave / Multi master modes possible

Advanced push button input functionality

- Extend timeout on manual intervention
- Optionally block sensor on manual intervention
- Unblock sensor when room when room is unoccupied, after a delay, immediately or after room is unoccupied.

Brightness sensor

- 2 threshold triggers (greater than / less than)
- Support for external or internal brightness sensor
- Measurement of multiple light sources such as LEDs, fluorescent lamps and halogen/incandescent lamps

Advanced behavior settings

- 4 operating modes (Fully automatic, absence, presence, and fully manual)
- Bus recovery options
- Cyclic sending

Set key parameters via objects

- Timeout
- Brightness Threshold
- Brightness Setpoint (Constant Light Control)
- Standby dimming level (Constant Light Control)

Diagnostic options

- Visual feedback LED
- Simple test mode for validating detection area
- Heartbeat object

Directive 2014/30/EU (Electromagnetic Compatibility (EMC))

Directive 2012/19/EU (WEEE)

Directive 2011/65/EU (RoHS)

Harmonised standards: EN 61000-6-1 Immunity for residential, commercial and light-industrial environments & EN 61000-6-3 Emission standard for residential, commercial and light-industrial environments in addition to EN 50491-5-2:2010

EN 60730-1:2016 - control type 1.Y, control Class A, rated 300,000 cycles and 60,000 hours

