



RF-DD1012-K4

wireless dual technology motion sensor, 12m LoNa

One way transmitter

The sensor has a chip tuned wireless transmitter that communicates with a LoNa receiver such as, for example the ZeroWire control panel. The learn-in process of the sensor is identical to the process used with legacy sensors. Each sensor reports a unique ID code with each transmission. The sensor also reports the battery and transmitter condition (supervisory signal) to the panel every 18 minutes.

Range Gated Radar Technology

This series of wireless motion sensors incorporate a Carrier Fire & Security unique range gated radar technology allowing the installer to define a clear borderline of the radar range as the radar is used to measure distance between the sensor and moving objects. Effectively the end-user will get rid of any nuisance alarms generated by movements outside the detection range. Every motion sensor comes with four possible radar ranges selectable via jumpers allowing the detection range to be tailored according to the room where the motion sensor is installed. The radar operates on 5.8GHz frequency and will not interfere with any WiFi network.

PIR combined with mirror power

The optical mirror technology gives the advantage of gliding focus, which creates a volumetric detection curtain from floor level up to installation height resulting in a sensor that never loses track of the object. In these series we are using a dual element digital pyro generating two volumetric curtains for each of the nine curtain sets.

Detection technologies working together

These dual tech motion sensors generate an alarm depending on what both technologies – range gated radar and PIR – saw within their detection coverage. But our dual tech go beyond a simple “AND” function : it classifies the signals from each technology – range gated radar and PIR – to have the best alarm result without being sensitive for nuisance signal sources. This technology creates a uniform sensitivity in all course directions.

Ease and flexibility of installation

- 1.Easy opening and closing system.
- 2.Easy access when changing the batteries.
- 3.Easy access to mirror optics.
- 4.Tolerates wall angle deviation and different mounting heights.
- 5.One mounting plate for all sensors in the series.

Other members of the family

This family includes a standard variant as well as a Pet Immune variant. The consistent family aesthetics between the various models ensure a professional approach when installing different sensor types.



Details

- Selectable range gated radar technology clearly defining the radar detection border
- PIR technology with mirror curtain optics
- Intelligent alarm decision based on signal classification of the PIR and radar alarm
- Full under-crawl detection
- No adjustment required for different mounting heights
- Tolerates wall angle deviation
- End-user friendly product design for exchanging batteries
- 3-years battery life with 2 batteries
- Several European security approvals

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Technical specifications

General

Technology	Dual
Application type	Wall mount
Anti masking	No
Pet immune	No
Camera	No
Pry-off tamper kit	On board
Detector start-up time	1 minute

Detection

Max. detection range	12 m
Detection range selection	4, 6, 9 and 12 m
No. of curtains	9
Coverage (field of view)	86°
Microwave frequency (nom.)	5.8 GHz
Max. microwave output (at 1m)	< -1.3 dBm
Undercrawl protection	Yes
Target speed range	0.3 m/s to 3 m/s

Wired / wireless

Wired-wireless	Wireless
Wireless frequency	433 MHz LoNa
Open-air range	300 m

Electrical

Current consumption	58 µA (average), 50 mA (max.)
Batteries	2 x 3.0 V (1300 mAh lithium)
Battery lifetime	3 years

Physical

Physical dimensions	130 x 69 x 53 mm
Net weight	176 g (including two batteries)
Colour	White
Mounting height	1.8 to 3 m, EN 2.3 to 2.6 m

Environmental

Operating temperature	-10°C to +55° C
Relative humidity	95% max. condensing
Environment	Indoor
IP rating	IP30 IK02

Regulatory

Compliancy	CE
Certification	EN50131 Grade 2, INCERT