DD1012AM-N

12 m Dual Technology motion sensor, 9 curtains, Anti-Mask, digital pyro

Patented range gated radar technology

Motion sensors of the DD1000 Series incorporate a Carrier Fire & Security patented and 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 pattern.
Every motion sensor comes with 4 possible radar ranges selectable via dip switches allowing the detection pattern to be tailored according to the room where the motion sensor is installed.
The radar operates on 5.8 GHz frequency.

The DD1012AM-N motion sensor incorporates a new digital pyro for an improved signal quality and a better immunity to electrical interferences.

PIR technology in combination with patented mirror optics

Our patented optical mirror technology gives the advantage of gliding focus, which creates a continuous detection curtain from floor level up to installation height.
Within our DD1012 series we are using a dual element pyro generating 2 volumetric curtains for each of the 9 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 its 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. Tolerates wall angle deviation and different mounting heights.
2. Limited loss of coverage when objects are placed in the field of the PIR vision.
3. Easy range setting via dip switches of the range gated radar in order to tailor the detection pattern to your needs.
4. Multiple build-in End-Of-Line resistor values with “easy wiring” option available.
5. Plug-in connector.

Anti-masking (optical and radar)

The use of Active Infrared and radar technology results in a superior anti-masking functionality that supervises the motion sensor on the inside and outside. Radar verification prevents from having unwanted AM alarms caused by e.g. insects. In advanced setting the AM alarm is held until the effective source of the anti-masking (e.g. spray,

Details

- Patented selectable range gated radar technology clearly defining the radar detection border
- PIR technology with patented mirror curtain optics
- Anti-masking variant using Active Infrared and radar technology to protect against sabotage actions outside and inside of the motion sensor
- Intelligent alarm decision based on signal classification of the PIR and radar alarm
- Automatic continuous self diagnostics on all technologies
- Green mode : option to switch off the radar technology when the security system is not armed
- Holding several security approvals including EN Grade III
- Incorporates a new digital pyro that detects the temperature fluctuations with high degree of precision

tape,…) has been removed. Even partial masking – so going beyond the EN Grade III standard – will be detected when in advanced setting.

Other members of the family

This family includes motion sensors with variants in detection range, two types of anti-masking masking technology and Pet Immunity. The consistent family aesthetics between the various models ensure a professional approach when installing different sensor types.

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Technical specifications

General

Technology	Dual
Application type	Wall mount
Anti masking	Yes
Pet immune	No
Camera	No
Pry-off tamper kit	On board
Detector start-up time	60 s

Detection

Max. detection range	12 m
Detection range selection	4, 6, 9, or 12 m selectable via dip switches
No. of curtains	9
Coverage (field of view)	78°
Microwave frequency (nom.)	5.8 GHz
Max. microwave output (at 1m)	0.003 µW/cm²
Undercrawl protection	Yes
Target speed range	0.2 to 3.0 m/s
Alarm memory	Yes
Alarm time	3 s
Peak-to-peak ripple immunity	2 V (at 12 VDC)

Wired / wireless

Wired-wireless	Wired

Inputs / outputs

Alarm relay characteristic	NC, 80 mA 30 VDC, Form A
Tamper relay characteristic	NC, 80 mA 30 VDC, Form A
Relay configuration	Multiple EOL values
Remote control lines	Day/Night, Walk test

Electrical

Power supply value	9 to 15 VDC (12 V nominal)
Current consumption	10 mA nominal

Physical

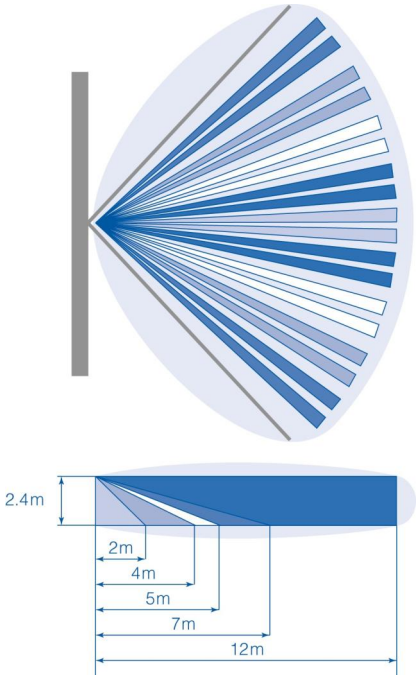
Physical dimensions	126 x 63 x 50 mm
Net weight	120 g
Colour	White
Mounting height	1.8 to 3 m

Environmental

Operating temperature	-10 to +55°C
Relative humidity	95% max., noncondensing
Environment	Indoor
IP rating	IP30 IK04

Regulatory

EN50131 grade	Grade 3
Compliancy	CE
Certification	INCERT, NFA2P



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