VE1012

PIR motion sensor, V2E, 12 m, 9 curtains

The power of mirror

Our motion sensors have the most advanced and sophisticated optics in the security industry. This unique optical mirror technology is a step and gliding focus, which creates a continuous curtain resulting in a sensor that never loses track of the object.
To increase detection coverage, the 1000 series sensors use the 3Brid orthogonal curtain design. This is a horizontal mirror structure that produces curtains with vertical orientation to detect infrared. This orthogonal invention is the key in adding curtains to the mirror without sacrificing signal strength, nor increasing the size of the sensor.

Patented Vector pyro

Infrared signals are captured by the pyro-electric sensor that is placed in the detectors' focal point. The conventional pyro generates a one-dimensional signal (value) to detect the presence of a source, and therefore its detection probability within the area is entirely determined by the resolution of the optics of the motion detector.
Due to the unique construction of the patented Vector pyro, a thermal source will generate a multi-dimensional signal (vector), allowing the pyro to determine not only the presence but also the direction of motion of a thermal source. This now means that the detection probability is equal to the product of the resolution of the optics and the multi-dimensional output of the pyro. This is a major advance in PIR technology capability.

V2E signal processing

The VE series of motion detectors incorporate a patented Vector Verified Enhanced (V2E) signal processing. Each type of signal source will generate a unique vector output captured by the Vector pyro. The digital signal processing will analyze each vector's shape and pattern, allowing it to distinguish different signal sources. It means that VE series motion sensors will not only identify non-thermal signal sources, but also filter out any potential nuisance signals such as stationary thermal sources, ventilators or strong light sources, and react only to alarm signals from intruders. Our PIR motion sensor with vector pattern recognition is unique.

Easy to install

PIRs of the 1000 series are the most rewarding sensors to install:
1. Tolerate wall angle deviation and different mounting heights.
2. Limited loss of coverage when objects are placed in the field of vision.
3. No range setting is required thanks to constant range sensitivity.
4. Plug-in electronics.

Complete family

The 1000 series are part of our range of motion sensors. This family includes motion sensors with variants in housing size, detection range, anti-masking, dual detection technology, addressable interfacing, wireless transmission and more.



Details

- Passive Infra Red motion sensor
- 3-Brid Gliding Focus Curtain mirror
- Plug-in electronics
- Sealed optics
- V2E signal processing for false alarm immunity
- Cloak and umbrella immunity
- Full under crawl detection
- Selectable coverage pattern using mirror masks
- Auto focus with constant range sensitivity
- No adjustment required for different mounting heights
- Tolerates wall angle deviation
- EN50131-2-2 Grade 2 certified
- Several European approvals

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Technical specifications

General

Technology	PIR
Application type	Wall mount
Anti masking	No
Pet immune	No
Camera	No
Signal processing	Vector Verified Enhanced (VE2)
Pry-off tamper kit	ST400 (optional)
Detector start-up time	25 s

Detection

Max. detection range	12 m
Detection range	12m 40 ft
No. of curtains	9
Coverage (field of view)	86°
Undercrawl protection	Yes
Target speed range	0.3 to 3.0 m/s
Alarm memory	No
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 when energised
Tamper relay characteristic	NC when cover closed
Relay configuration	Isolated or 4k7 EOL
Remote control lines	Walk test

Electrical

Operating voltage	9 to 15 VDC (12 V nominal)
Current consumption	4.4 mA

Physical

Physical dimensions	108 x 60 x 46 mm
Net weight	120 g
Colour	White
Mounting height	1.8 to 3 m

Environmental

Operating temperature	-10 to +50°C 14 to 130°F
Relative humidity	0 to 95% noncondensing
Environment	Indoor
IP rating	IP30

Regulatory

EN50131 grade	Grade 2

As a company of innovation, Kidde Global Solutions reserves the right to change product specifications without notice. For the latest product specifications, visit firesecurityproducts.com online or contact your sales representative.

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