

# VE1120AM

## 20m Vector PIR 11C AM

### The power of mirror

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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 1100 series sensors incorporate a 3-step gliding focus, which produces 11 continuous curtains to detect infrared signals up to a 20m distance.

### Patented Vector pyro

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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

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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

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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.

### Optical anti-masking

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The best technology to protect a motion sensor from being masked is active infrared. We have a track record of developing products not only to meet the security grades for high-risk applications such as EN50131-2-2 Grade 3 and VdS class C, but also beyond that. In such, the VE anti-masking sensors not only have a superior protection



### Details

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- Passive Infra Red motion sensor
- Automatic reporting of all masking attempts
- 3-Step 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 3 certified
- Several European approvals

against sabotage attempts such as spraying and covering the front,  
but also against attacks from other sides thanks to its interior infrared  
technology.

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### Technical specifications

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#### General

Technology	PIR
Anti masking	Yes
Pet immune	No
Camera	No
Signal processing	Vector Verified Enhanced (VE2)
Pry-off tamper kit	On board
Detector start-up time	60 s

#### Detection

Max. detection range	20 m
Coverage (field of view)	86°
Undercrawl protection	Yes
No. of curtains	11
Alarm memory	Yes
Alarm time	3 s
Target speed range	0,2 to 3.0 m/s
Peak-to-peak ripple immunity	2V (at 12 VDC)

#### Wired/wireless

Wired-wireless	Wired
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#### Inputs/outputs

Alarm relay characteristic	NC, 80 mA 30 VDC, Form A
Tamper relay characteristic	NC, 80 mA 30 VDC, Form A
Anti mask relay characteristic	NC, 80 mA 30 VDC, Form A
Relay configuration	Isolated or 4k7 EOL
Remote control lines	Day/Night, Walk test

#### Electrical

Operating voltage	9 to 15 VDC
Current consumption	10 mA

#### Physical

Physical dimensions	125 x 65 x 60 mm (W x H x D)
Net weight	150 g
Colour	White
Mounting height	1.8 to 3 m

#### Environmental

Operating temperature	-10 to +55°C 14 to 130°F
Relative humidity	95 % relative humidity
Environment	Indoor
IP rating	IP30

#### Standards & regulation

EN50131 grade	Grade 3
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