

# VE1012AM

## PIR motion sensor, V2E, 12 m, 9 curtains, anti-mask

### 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 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

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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.

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



### Details

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

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## Technical specifications

### General

|                    |                                |
|--------------------|--------------------------------|
| Technology         | PIR                            |
| Application type   | Wall mount                     |
| Anti masking       | Yes                            |
| Pet immune         | No                             |
| Camera             | No                             |
| Signal processing  | Vector Verified Enhanced (VE2) |
| Pry-off tamper kit | On board                       |

### Detection

|                          |      |
|--------------------------|------|
| Max. detection range     | 12 m |
| No. of curtains          | 9    |
| Coverage (field of view) | 86°  |
| Undercrawl protection    | Yes  |
| Alarm memory             | Yes  |

### 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

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

### Physical

|                     |                  |
|---------------------|------------------|
| Physical dimensions | 108 x 60 x 46 mm |
| Colour              | White            |
| Mounting height     | 1.8 to 3 m       |

### Environmental

|                       |                        |
|-----------------------|------------------------|
| Operating temperature | -10 to +50°C           |
| Relative humidity     | 0 to 95% noncondensing |
| Environment           | Indoor                 |

### Regulatory

|               |         |
|---------------|---------|
| EN50131 grade | Grade 3 |
|---------------|---------|



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