VE735

PIR motion sensor, 11 curtains, V2E technology, 60 m

Patented pyro and V2E signal processing

Infrared signals are captured by the pyro-electric sensor, which 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. 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.



Proprietary HDO mirror

With our unique Step & Gliding focus mirror, we have a well-established reputation for producing effective volumetric motion sensors with multi-curtains that provide maximum coverage density and are easy to install. With the "High Density Optics" (HDO) mirror, the VE700 series have a comprehensive floor pattern, made by a wide-angle mirror featuring 11 high-density curtains over a 90° field-of-view, enhanced with a 60m long-range curtain. The VE700 is the only motion detector on the market that can offer this unique combination in a single product.

Detector setting and Chime mode

The VE700 has three sensitivity settings: Low, Standard and High. Sensitivity is set by selecting different modes for running the pattern recognition algorithms. The ex-factory setting is Standard, which ensures the best performance for most applications. The sensitivity level can be easily modified with a jumper. The pattern of the output vector of the VE700 pyro contains unique information about the origin of the source. That's why the DSP in the VE700 can recognise the direction in which the thermal source is moving. In other words, the VE700 allows you to determine the direction of the intruder across the surveillance area. When the chime mode is ON, the VE700 can trigger an alarm when an intruder walks from left to right and differentiate intruder movement from right to left, and vice versa.

Plug-in electronics and self-test

All electronics of the VE700 are monitored constantly, in order to

Details

- Passive Infra Red motion sensor
- High density "Step & Gliding Focus Multi Curtain" mirror
- Plug-in electronics
- Sealed optics
- "Vector Verified Enhanced" detection algorithm
- Selectable range with full undercrawl detection
- On-site individual coverage pattern selection
- 3 alarm sensitivities
- No adjustment required for different mounting heights
- Tolerates wall angle deviation
- Pry-off and cover tamper
- Complies with EN50131-2-2
- Several European approvals

report the unlikely case of a defect. The plug-in concept ensures easy installation without any worry about damaging the sensor. All jumpers and switches are in the sub-frame, which means that setting any desired characteristic can be done conveniently in your hand.

Accessories

The VE710 laser alignment tool is the recommended tool to use during installation for aligning the sensors in long corridor applications. The SB01 swivel and mounting bracket can be used with the VE735.

VE735

PIR motion sensor, 11 curtains, V2E technology, 60 m

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	On board

Detection

Max. detection range	60 m
Detection range selection	20 m or 60 m
No. of curtains	11
Coverage (field of view)	86°
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/NO, 80 mA 30 VDC, Form C
Tamper 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 (12 V nominal)
Power supply type	12 VDC
Current consumption	11 mA (nom.)

Physical

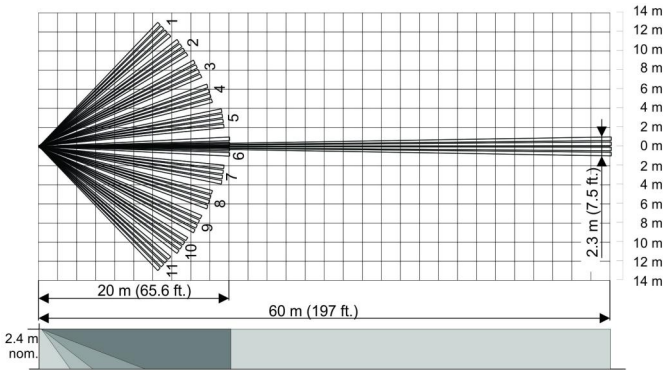
Physical dimensions	93 x 175 x 66 mm
Net weight	275 g
Colour	White
Mounting height	1.8 to 3 m

Environmental

Operating temperature	-10 to +55°C
Relative humidity	0 to 95% noncondensing
Environment	Indoor
IP rating	IP30

Regulatory

EN50131 grade	Grade 2
Certification	VdS



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.

Last updated on 18 June 2026 - 14:33