

# PDM-E-IXD12

## MAGIC E-BUS DUAL MOTION DETECTOR

VANDERBILT



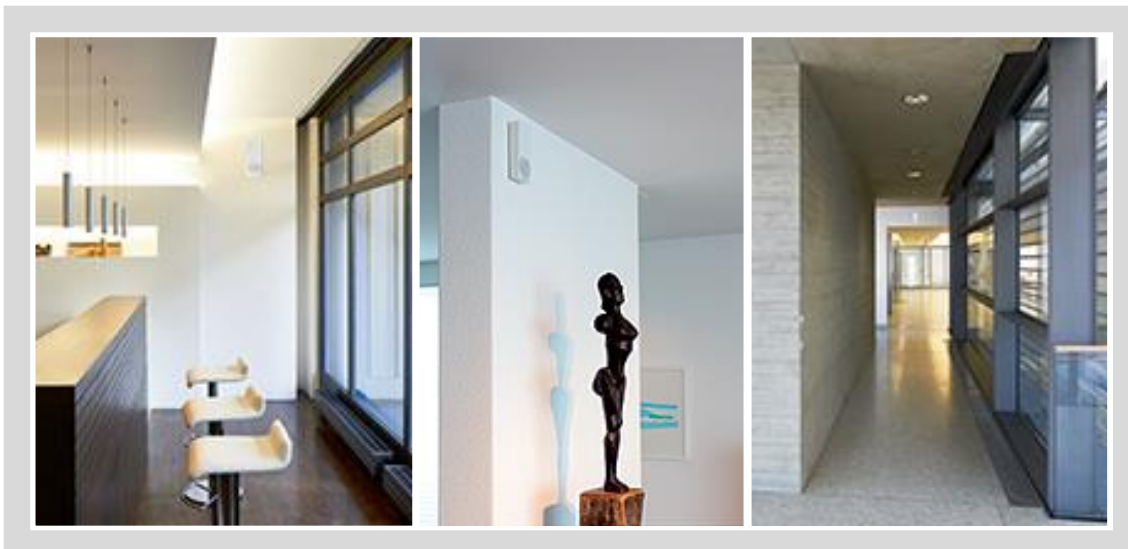
Vanderbilt's MAGIC E-BUS PIR and Dual motion detectors are an exciting new advance in security that provide the most reliable, convenient and cost effective solution for industry leading catch performance and false alarm immunity. The detectors feature a modern, slim design and share the same low-profile housing so intruders cannot tell which type of detector they are faced with. MAGIC E-BUS detectors are offered in either 12m or 18m range and are optionally available with either integrated anti-masking technology, curtain mirror or pet immunity.

The PDM-E-IXD12 E-BUS Dual motion detector offers reliable detection of intruders and high false alarm immunity. Its performance is based on an improved version of Vanderbilt's Matchtec algorithm, which combines passive infrared (PIR) and microwave (MW) channels to make extraordinarily accurate decisions on motion within their detection zone. Intelligent processing routines analyse the relative strength of the IR and MW signals received from a moving object in order to make sound decisions. It is even possible to use multiple detectors in close proximity to each other, since the algorithm reduces interference between the MW modules. This increases flexibility in selecting the installation site.

All MAGIC BUS models are designed as addressable detectors on the E-BUS communication interface - a 2-wire serial BUS with multi-master properties. This dramatically reduces wiring, installation equipment and labour costs, while providing benefits of remote services. Each MAGIC BUS detector also includes an additional zone input for convenient connection of an additional external device, saving time and effort of having to wire back to the panel.

### Key Features include:

- Supports E-BUS communication interface
- Unmatched detection performance based on patented MAGIC mirror technology
- High immunity against false alarms
- 12m volumetric optics with undercrawl protection – 20m gapless curtain (option)
- Extra zone input for additional external device such as glass break detector or magnetic contact
- Unique End-of-line concept eliminates time-consuming resistor wiring
- Flexible, fast and error-free installation with sensitivity adjustment and pet immunity (option)
- Compliance with latest approval standards such as EN 50131-2-4 and VdS Class B
- Modern and elegant design



## Features & Benefits

### ■ Reliable detection

Thanks to the patented MAGIC mirror technology, intruders are detected effectively and reliably. The new double-mirror principle provides homogeneous coverage and sensitivity to all areas within the detection field. The proven and further enhanced Matchtec algorithm supports the innovative mirror optic.

### ■ Detector BUS Solution

The SPC enhanced E-BUS Gateway is specifically designed for daisy-chain networks, in which multiple BUS devices can be wired together in spur or in a ring. The SPCG310 enables communication between the SPC controller and a wide range of E-BUS peripherals and now supports up to 56 MAGIC E-BUS detectors per SPC panel.

### ■ High hurdles for intruders

A detector cannot be identified by its housing. Potential intruders – when confronted with MAGIC motion detectors – must assume the highest security level (e.g. EN 50131-2-4 Grade 3) irrespective of the actual detector type.

### ■ Cost-effective

An additional input and output enable magnetic contacts and glass break detectors to be directly connected to the MAGIC E-BUS motion detector. Therefore, an additional expander module becomes redundant.

### ■ E-BUS Connection

MAGIC detector PDM-E-IXD12 with integrated E-BUS can be directly connected either to a Sintony panel or via the E-BUS Gateway to a SPC panel. Thus, no End-of-Line (EoL) resistors are necessary.

### ■ Fast & easy set-up

The new Auto Walktest feature accelerates the installation of the detector. Verifying the installation and operation of the detector by means of a Walktest no longer requires repeated openings of the detector nor adapting DIP switch settings.

## Recommended Accessories

### ■ Mounting bracket

The PZ-MBG2 mounting bracket provides convenient cable guiding within the bracket and can be used for all MAGIC Mirror models for both wall and ceiling mounting.

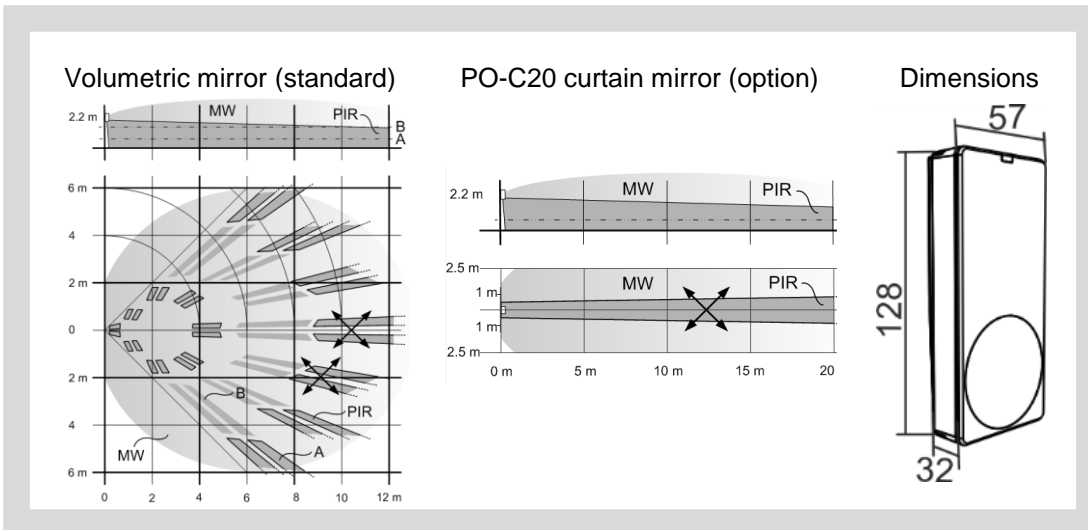
### ■ Pet-Clip

With the help of PO-CL Pet-clip, the detector ignores the motion caused by animals (up to 20kg) and thus reduces the likelihood of false alarms.

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### ■ Technical Data

Detection characteristic / range	Volumetric / 12m
Optical system	MAGIC mirror
Pet immunity	Yes (optional)
Microwave frequency	9.35GHz
Power supply	Via E-Bus 9V <sub>DC</sub> ~ 16V <sub>DC</sub>
Current consumption (at 12V <sub>DC</sub> ) – PDM-E-IXD12	
Idle state	4.5mA
With 2 x 4.7k EOL	+ 2mA
Control inputs	Programmable
Output OUT1	Open collector R = 35Ω, I <sub>max</sub> = 120mA
Walk speeds – PDM-E-IXD12	
Volume mirror / Curtain mirror PO-C20	0.2 <sup>m</sup> / <sub>s</sub> ~ 3.0 <sup>m</sup> / <sub>s</sub>
Algorithm	MATCHTEC
Resistors (default)	
Input 1	1R/2R, 4.7kΩ, NO, NC and glass break detector
Input 2	1R/2R, 4.7kΩ, NO, NC
Input 3	2R, 4.7kΩ, internal detector alarm and tamper
Input 4	Not used
Output 1	For internal detector set/unset or external detector (e.g. glass break detector) free programmable
Output 2	For internal detector Walktest
Environmental conditions	
– Operating temperature	-10°C ~ 55°C
– Storage temperature	-20°C ~ 60°C
– Air humidity (EN 60721)	< 95%rh, non-condensing
– EMC-resistance up to 2.7GHz	10 <sup>V</sup> / <sub>m</sub>
– Housing protection category (EN 60529, EN 50102)	IP41 / IK02
Colour	RAL9003
Approvals	VdS Class B, EN 50131-2-4 Grade 2

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### ■ Ordering Data

Type	Art. No.	Description	Weight*
PDM-E-IXD12	V54531-F130-A100	PDM-E-IXD12 E-Bus 12m DUAL Detector	0.110kg
PO-C20	V54539-F122-A100	PO-C20 Curtain Mirror for PDM-I12 (4 pcs)	0.033kg
PZ-MBG2	V54539-F124-A100	PZ-MBG2 Mounting Bracket G2 for PDM	0.051kg
PZ-CA	V54539-F125-A100	PZ-CA 1/4" Adapter for Camera Bracket (4 pcs)	0.022kg
PO-CL	V54539-F126-A100	PO-CL Pet Clip for PDM-I12 (10 pcs)	0.007kg
PO-FM	V54530-H101-A100	PO-FM Flush Mount Housing Base PDM-I12	0.040kg
PO-MHB12	V54530-H102-A100	PO-MHB12 Metalized Housing Base PDM-I12	0.049kg
SPCG310	V54554-A101-A100	SPCG310.000 SPC E-BUS Gateway	0.020kg

\* Total weight of the product inclusive of the weight of its accessories and packaging.

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