PDM-E-I18T

MAGIC E-BUS PIR MOTION DETECTOR

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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 or curtain mirror.

The PDM-E-I18T E-BUS PIR motion detector utilizes the patented MAGIC Mirror technology, which sets new standards in detection sensitivity and enables an extremely compact design. The innovative dual mirror design increases the focal length, which gives the detectors more homogeneous detection sensitivity, especially for wider areas. A new integrated white-light filtering system reduces false alarms caused by external light sources such as car headlights or lamps. For added peace of mind, the PDM-E-I18T is offering an integrated anti-masking technology (monitoring against covering).

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
- 18m volumetric optics with undercrawl protection – 30m gapless curtain (option)
- Integrated antimask protection
- 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 50131-2-2 and VdS Class C
- Modern and elegant design
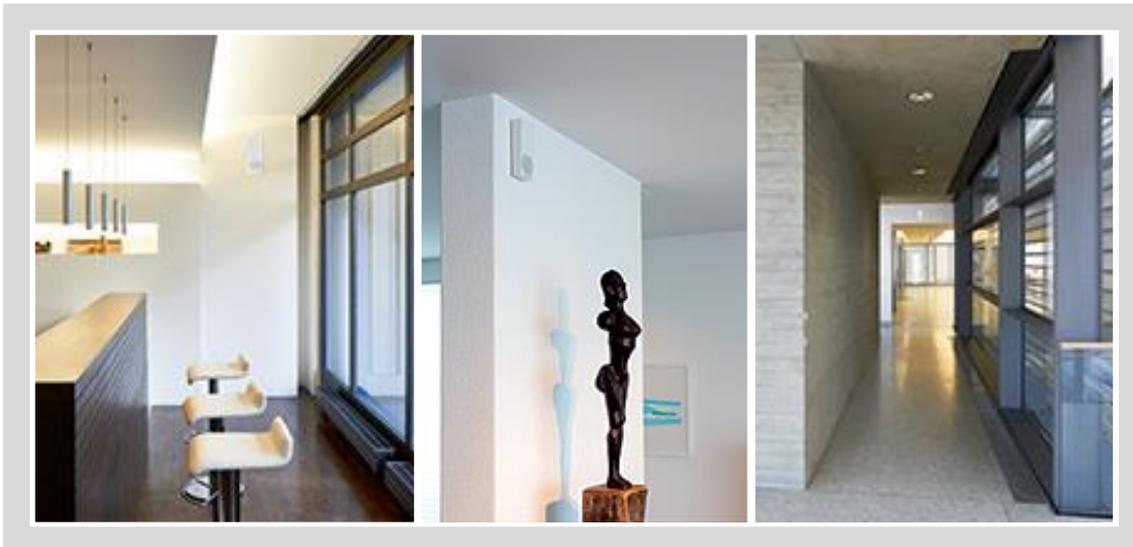
Features & Benefits

■ 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 Visatec algorithm supports the innovative mirror optic.

■ 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.

■ E-BUS Connection

MAGIC detector PDM-E-I18T 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.

■ 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.

■ 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.

■ 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.
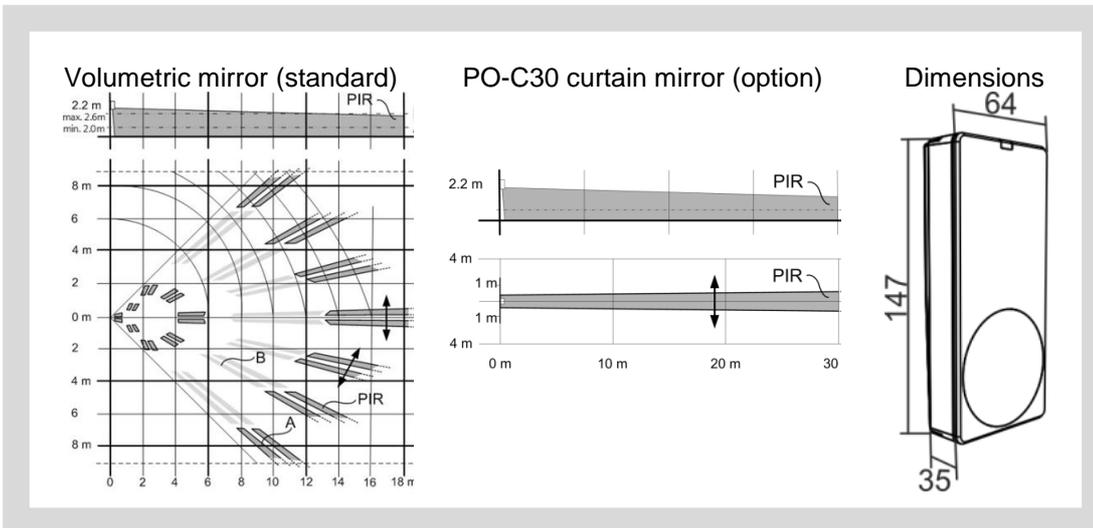
■ Curtain Mirror

The PO-C30 MAGIC curtain mirror has overlapping coverage zones to form a complete monitored area of up to 30m.

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Volumetric mirror (standard)   PO-C30 curtain mirror (option)   Dimensions

■ Technical Data

Detection characteristic / range	Volumetric / 18m
Optical system	MAGIC mirror
Pet immunity	Yes (optional)
Power supply	Via E-Bus $9V_{DC}$ ~ $16V_{DC}$

Current consumption (at $12V_{DC}$)
– PDM-E-I18T
        Idle state
        With 2 x 4.7k EOL
	
	4.2mA
	+ 2mA

Control inputs	Programmable
Output OUT1	Open collector R = 35Ω, Imax = 120mA
Walk speeds – PDM-E-I18T Volume mirror / Curtain mirror PO-C30	 $0.1^m/_s$ ~ $4.0^m/_s$
Algorithm	VISATEC

Resistors (default)
        Input 1
        Input 2
        Input 3
        Input 4
 	
        Output 1
 	
        Output 2
	
	1R/2R, 4.7kΩ, NO, NC and glass break detector
	1R/2R, 4.7kΩ, NO, NC
	2R, 4.7kΩ, internal detector alarm and tamper
	2R, 4.7kΩ, for fault
	
	For internal detector set/unset or external detector
	(e.g. glass break detector) free programmable
	For internal detector Walktest

Environmental conditions – Operating temperature – Storage temperature – Air humidity (EN 60721) – EMC-resistance up to 2.7GHz – Housing protection category (EN 60529, EN 50102)	 -10°C ~ 55°C -20°C ~ 60°C < 95%rh, non-condensing $10^V/_m$ IP41 / IK02
Colour	RAL9003
Approvals	VdS Class C, EN 50131-2-2 Grade 3, PD6662

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■ Ordering Data

Type	Art. No.	Description	Weight*
PDM-E-I18T	V54530-F116-A100	PDM-E-I18T E-Bus 18m PIR Detector w AM	0.110kg
PO-C30	V54539-F123-A100	PO-C30 Curtain Mirror for PDM-I18 (4 pcs)	0.046kg
PZ-MBG2	V54539-F124-A100	PZ-MBG2 Mounting Bracket G2 for PDM	0.051kg
PZ-CA	V54539-F125-A100	PZ-CA $\frac{1}{4}$" Adapter for Camera Bracket (4 pcs)	0.022kg
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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