



MAGIC

Dual Motion Detectors

PDM-IXx12

PDM-IXx12T



MAGIC motion detector PDM-IXx12/T is impressive with its modern and elegant design. Its style is suitable for all installation situations. Together with the enhanced Matchtec algorithm, its patented MAGIC mirror provides reliable detection of intruders and the highest false alarm immunity. Flexible installations can be carried out quickly and error-free due to features like Auto Walktest and new End-of-Line concept (EoL).

- Unmatched detection performance – thanks to MAGIC mirror technology
- Highest immunity against false alarms
- 12 m volumetric optics with undercrawl protection – 20 m gapless curtain (option)
- Flexible, fast and error-free installation
- Modern and elegant design
- Low current consumption



Functions

■ Reliable detection

Thanks to the new and innovative MAGIC mirror (patented), 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 new optics. The Matchtec algorithm combines the passive infrared signal with the active microwave signal in a very clever way.

Therefore, the dual detector PDM-IXx12/T is qualified for usage both in a very harsh environment and anywhere that the highest false alarm immunity is a must.

■ High security level

The integrated anti-mask function reliably detects any potential covering of the detector. In addition to this, the sophisticated mirror design ensures full under-crawl protection.

Therefore, MAGIC dual detector PDM-IXx12T complies with the highest security standards, such as VdS Klasse C, EN 50131-2-4 Grade 3 and many more.

■ 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.

■ Fast and error-free installation

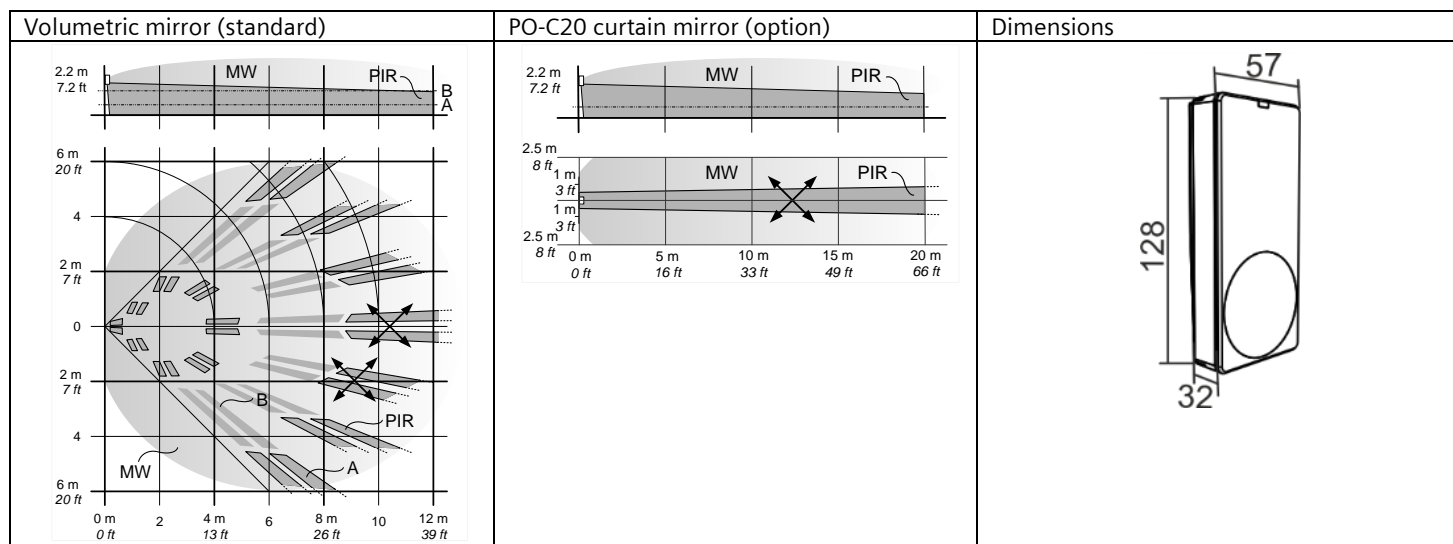
Thanks to pre-fitted End-of-Line (EoL) resistors, which are optimised for Siemens intrusion panels (SPC, Sintony), the time-consuming and error-prone resistor configuration can be omitted.

But PDM-IXx12/T can also be easily adapted to other intrusion panels: by simply replacing the pre-fitted resistors with standard resistors which are simply plugged-in or by usage of optional EoL boards. The connection to the intrusion panel can be done faster, easier and more reliably than with conventional wiring methods.

Additionally, 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.

■ Low current consumption

State of the art energy concepts and electronic components provide low current consumption of the detectors. Not only energy costs are decreased across the years of utilisation but also more cost efficient uninterrupted power supply units (like batteries) can be used in the intrusion panels.



■ Technical data

Detection characteristics / range	Volumetric / 12m
Optical system	MAGIC mirror
Pet immunity	Yes (option)
Microwave (MW) frequencies	
PDM-IXA12/T	10.525 GHz
PDM-IXD12/T	9.35 GHz
PDM-IXE12/T	10.587 GHz
Power supply	9 ... 16 VDC (12 V nom.)
Max. ripple (0 ... 100 Hz)	1,0 VSS
Voltage control	Alarm at 8,0 ± 0,5 VDC
Current consumption (at 8 ... 16 VDC)	
PDM-IXx12	
Idle state	4.8 mA (rms), 7.1 mA (max peak)
LED ON	6.7 mA (rms), 9.0 mA (max peak)
PDM-IXx12T	
Idle state	6.3 mA (rms), 8.5 mA (max peak)
LED ON	8.3 mA (rms), 10.5 mA (max peak)
Control inputs	LOW ≤ 1,5 V / HIGH ≥ 3,5 V R _{Pull-up} (internal) = 470 kΩ
Outputs	Open collector, R = 35 Ω, I _{max} = 120 mA
Walking speeds	
PDM-IXx12	
Volume mirror / curtain mirror PO-C20	0,2 ... 3,0 m/s / 0,2 ... 3,0 m/s
PDM-IXx12T	
Volume mirror / curtain mirror PO-C20	0,1 ... 4,0 m/s / 0,1 ... 4,0 m/s
Algorithm	MATCHTEC
EoL resistors (pre-fitted)	
RI	4.7 kΩ ±5%, 250 mW
RF	2.2 kΩ ±5%, 250 mW
REoL	4.7 kΩ ±5%, 250 mW
Environmental conditions	
Operating temperature	- 10° ... + 55°C
Storage temperature	- 20° ... + 60°C
Air humidity (EN 60721)	< 95% RH, non-condensing
EMC-resistance up to 2,7 GHz	10 V/m
Housing protection category (EN 60529, EN 50102)	IP41 / IK02
Approvals (pending)	
PDM-IXA12 / PDM-IXA12T	EN50131-2-4 grade 2 / EN50131-2-4 grade 3
PDM-IXD12 / PDM-IXD12T	VdS Klasse B / VdS Klasse C
PDM-IXE12 / PDM-IXE12T	NF&A2P Grade 2 / NF&A2P Grade 3

■ Ordering Informations

Type	Order No.	Description	Weight*
PDM-IXA12	S54531-F113-A100	Dual Detector 10.525GHz	0.1 kg
PDM-IXD12	S54531-F124-A100	Dual Detector 9.35GHz	0.1 kg
PDM-IXE12	S54531-F114-A100	Dual Detector 10.587GHz	0.1 kg
PDM-IXA12T	S54531-F116-A100	Dual Detector 10.525GHz with Anti-mask	0.1 kg
PDM-IXD12T	S54531-F115-A100	Dual Detector 9.35GHz with Anti-mask	0.1 kg
PDM-IXE12T	S54531-F117-A100	Dual Detector 10.587GHz with Anti-mask	0.1 kg
PO-C20	S54539-F122-A100	Curtain Mirror Set (4p cs) for PDM-I12	0.1 kg
PZ-MBG2	S54539-F124-A100	Mounting Bracket G2 for PDM	0.1 kg
PZ-CA	S54539-F125-A100	1/4" Adapter for Camera Cracket, Set (4 pcs)	0.08 kg
PO-CL	S54539-F126-A100	Pet Clip for PDM-I12 (Set of 10 pcs.)	0.05 kg
PO-FM	S54530-H101-A100	Flush Mount Housing Base PDM-I12	0.04 kg
PO-MHB12	S54530-H102-A100	Metalized Housing Base PDM-I12	0.03 kg
PO-PA01	S54539-F127-A100	EOL PCB RF=4k7 RI=2k2 REoL=2k2, (Set of 100 pcs.)	0.15 kg
PO-PA02	S54539-F127-A200	EOL PCB RF=2k2 RI=4k7 REoL=2k2 (Set of 100 pcs.)	0.15 kg
PO-PA03	S54539-F127-A300	EOL PCB RF=12k RI=1k REoL=1k (Set of 100 pcs.)	0.15 kg
PO-PA04	S54539-F127-A400	EOL PCB RF=12k RI=6k8 REoL=4k7 (Set of 100 pcs.)	0.15 kg
PO-PA05	S54539-F127-A500	EOL PCB RF=1k RI=3k3 REoL=3k3 (Set of 100 pcs.)	0.15 kg

* units incl. packing material, accessories which is part of scope of supply and technical documentation

For additional products and accessories, please go to www.siemens.com/intrusion > Catalogue Downloads.

Die Informationen in diesem Dokument enthalten allgemeine Beschreibungen der technischen Möglichkeiten, welche im Einzelfall nicht immer vorliegen müssen. Die gewünschten Leistungsmerkmale sind daher im Einzelfall bei Vertragsabschluss festzulegen.

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