



Intrusion

Internal motion detectors by Siemens – Range and application overview

	IR80B	IRM80	IR100B	IR120	
					
	Easytec™	Easytec™	Swisstec	Swisstec	
Applications and technologies					
Applications	Residential	Residential	Residential	Residential / small commercial	sn
Environmental conditions	Quiet	Harsh	Quiet	Moderate	
Detection technology ¹⁾	PIR	PIR & MW	PIR	PIR	
Bus version				LSN	
Detection range					
Volume range Distance: Area:	12 m 144 m ²	12 m 144 m ²	12 m 144 m ²	12 m 144 m ²	
Curtain range	12 m	12 m	20 m	20 m	
Detection speed	0.3 ... 3.0 m/s	0.2 ... 3.0 m/s ³⁾	0.2 ... 3.0 m/s ³⁾	0.2 ... 3.0 m/s ³⁾	0
Features					
Pet immunity up to	12 kg	12 kg	10 kg (20 kg ²⁾)	20 kg (40 kg ²⁾)	
Creep zone protection (look down zone)			■	■	
Tamper contact	■	■	■	■	
Back tamper			■	■	
Draught & insect protection		■	■	■	
Easy-click installation			■	■	
Antimasking (real time)					
Antiblocking (real time)					
Selectable monitoring zones					
Selective motion direction detection					
Microwave switch-off					
Optics / signal analysis					
Optics	Fresnel lens	Fresnel lens	Silver Triplex Mirror	Black Triplex Mirror	Bl
Number of zones			52	52	
Detection sensitivity (number of levels)	2	2	2	4	
Temperature compensation	Standard	Standard	Standard	Advanced	
Multiple stage white light suppression	2 stages	2 stages	2 stages	3 stages	
Inputs / outputs					
Alarm outputs	30 VDC / 100 mA / Ri 32 Ohm	30 VDC / 100 mA / Ri 45 Ohm	30 VDC / 100 mA / Ri 33 Ohm	30 VDC / 100 mA / Ri 33 Ohm	30
Alarm holding time	2..3 s	2..3 s	2..3 s	2..3 s	
Tamper output	30 VDC / 50 mA	30 VDC / 50 mA	30 VDC / 50 mA	30 VDC / 50 mA	3
Technical specifications					
Frequency (microwave, ultrasound, photo)		2,45 GHz (MW)			2
Recommended mounting height Volume: Curtain:	2.0–2.4 m 1.8–2.4 m	2.0–2.4 m 1.8–2.4 m	1.8–2.6 m 1.8–4.0 m	1.8–2.6 m 1.8–4.0 m	
Dimensions (H x W x D)	87 x 51 x 45 mm	87 x 51 x 45 mm	115 x 59 x 41 mm	115 x 59 x 41 mm	11
Supply voltage	9.0–16.0 VDC	8.0–16.0 VDC	9.0–16.0 VDC	8.0–16.0 VDC	
Current consumption (typical / max.) ⁶⁾	12 / 16 mA	4.5 / 18 mA	9 / 9 mA	6 / 6 mA	
Operating temperature	–20 ... +55 °C	–20 ... +55 °C	–20 ... +55 °C	–20 ... +55 °C	
Housing protection	IP41 / IK02	IP41 / IK02	IP41 / IK02	IP41 / IK02	
Approvals & certifications*					
EN50131-Grade	2	2	2	2	
Environmental class II	■	■	■	■	
VdS approval class				B	

* For information on country specific approvals, please contact your local Siemens representative.

Siemens control panels / environments	
Sintony 60	Especially recommended for home and small offices security applications
Sintony 120	
Sintony 220	Especially recommended for ho
Sintony 410	

1) PIR: Passive Infrared; MW: Microwave; US: Ultrasound; ODS: Optical Detection System

2) With clip

IRM120	IR200	IR270	IR310/312	IRM270	UP370	IR2
						
Matchtec®	Visatec®	Visatec®	Visatec®	Matchtec®	Matchtec®	Visa
Residential / small commercial	Small commercial / commercial	Small commercial / commercial	Commercial / industrial	Commercial / industrial	Commercial / industrial	Comm
Harsh	Moderate	Moderate	Moderate	Harsh	Harsh	Mod
PIR & MW	PIR	PIR	PIR	PIR & MW	PIR & US	P
	LSN					LS
12 m 144 m²	15 m 225 m²	18 m 324 m²	18 m ⁴⁾ 324 m²	18 m 324 m²	10 m (6 m with small size mirror) 100 m²	18
12 m	25 m	25 m (IR270MD 30 m)	50 m ⁴⁾	25 m	–	25
0.2 ... 3.0 m/s ³⁾	0.2 ... 3.0 m/s ³⁾	0.2 ... 4.0 m/s		0.2 ... 4.0 m/s	0.1 ... 4.0 m/s	0.1 ...
20 kg						
■	■	■	■	■	■	■
■	■	■	■	■	■	■
■	■	■	■	■	■	■
■	■	■	■	■	■	■
■	■	■	■	■	■	■
				■		
Black Triplex Mirror	Black Mirror	Black Triplex Mirror	Silver Mirror	Black Triplex Mirror	Black Mirror	Black Trip
52	18	52	20 ⁵⁾	52	18	5
4	4	4	2	4	4	4
Advanced 3 stages	Advanced 3 stages	Advanced 3 stages	Standard 2 stages	Advanced 3 stages	Advanced 3 stages	Adva
0 VDC / 100 mA / Ri 45 Ohm	30 VDC / 100 mA / Ri 32 Ohm	30 VDC / 100 mA / Ri 45 Ohm	30 VDC / 75 mA / Ri 33 Ohm	30 VDC / 100 mA / Ri 35 Ohm	30 VDC / 100 mA / Ri 32 Ohm	30 VDC / Ri 45
2..3 s	2..3 s	2..3 s	2..3 s	2..3 s	2..3 s	2..
30 VDC / 50 mA	30 VDC / 50 mA	30 VDC / 100 mA	30 VDC / 50 mA	30 VDC / 50 mA	30 VDC / 50 mA	30 VDC /
2,45 GHz (MW)				⁷⁾	25,6 kHz (US)	
2.0–2.6 m 2.0–3.5 m	1.8–2.6 m 1.8–4.0 m	1.8–2.5 m 2.0–4.0 m	1.8–2.5 m 2.0–4.0 m	2.0–2.5 m 2.0–3.5 m	1.8–2.6 m –	1.8– 2.0–4
5 x 50 x 65 mm	136 x 55 x 45 mm	136 x 55 x 50 mm	192 x 86 x 97 mm	136 x 55 x 57 mm	170 x 70 x 63 mm	136 x 55
8.0–16.0 VDC	8.0–16.0 VDC	8.0–16.0 VDC	10.0–16.0 VDC	8.0–16.0 VDC	8.0–16.0 VDC	8.0–16
7.5 / 20 mA	7 / 16 mA	3 / 10 mA	12 / 29 mA	7.5 / 13 mA	17 / 33 mA	3 / 1
–20 ... +55 °C	–20 ... +55 °C	–20 ... +55 °C	–20 ... +55 °C	–20 ... +55 °C	–20 ... +55 °C	–20 ...
IP41 / IK02	IP41 / IK02	IP41 / IK02	IP41 / IK02	IP41 / IK02	IP41 / IK02	IP41
2	2	2	2	2	2	3
■	■	■	■	■	■	■
B	B	B	B	B	B	6

All Siemens detectors are compatible with all Siemens control panels and can be used in any combination to design a complete intruder detection system						
Home and small offices security applications						
	Especially recommended for small to medium size businesses					
						Especially re

3) 0.2 ... 4.0 m/s with curtain

4) Volume range 18 m with IR310; Curtain range 50 m with IR312

5) IR310: 20 zones; IR312: 10 zones

6) Quiescent / when alarm occurs

Recommended for high security or large facilities				

7) 10.525 GHz: IRM270C, IRM270CT; 9.9 GHz: IRM270CFR, IRM270CTFR;
10.687 GHz: IRM270CUK, IRM270CTUK; 9.35 GHz: IRM270MD, IRM270T



Private homes and residential buildings



Small commercial outlets

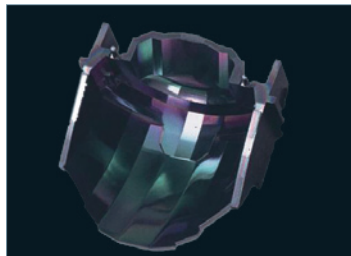


Large commercial complexes

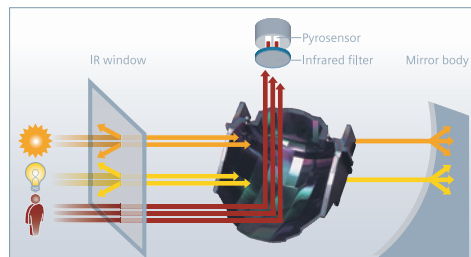


Industrial premises

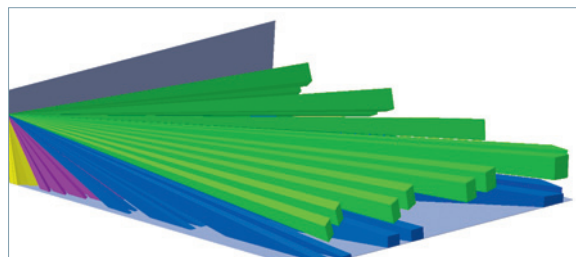
The right technology for the right environment



Patented Black Triplex Mirror technology



Unrivalled white light immunity



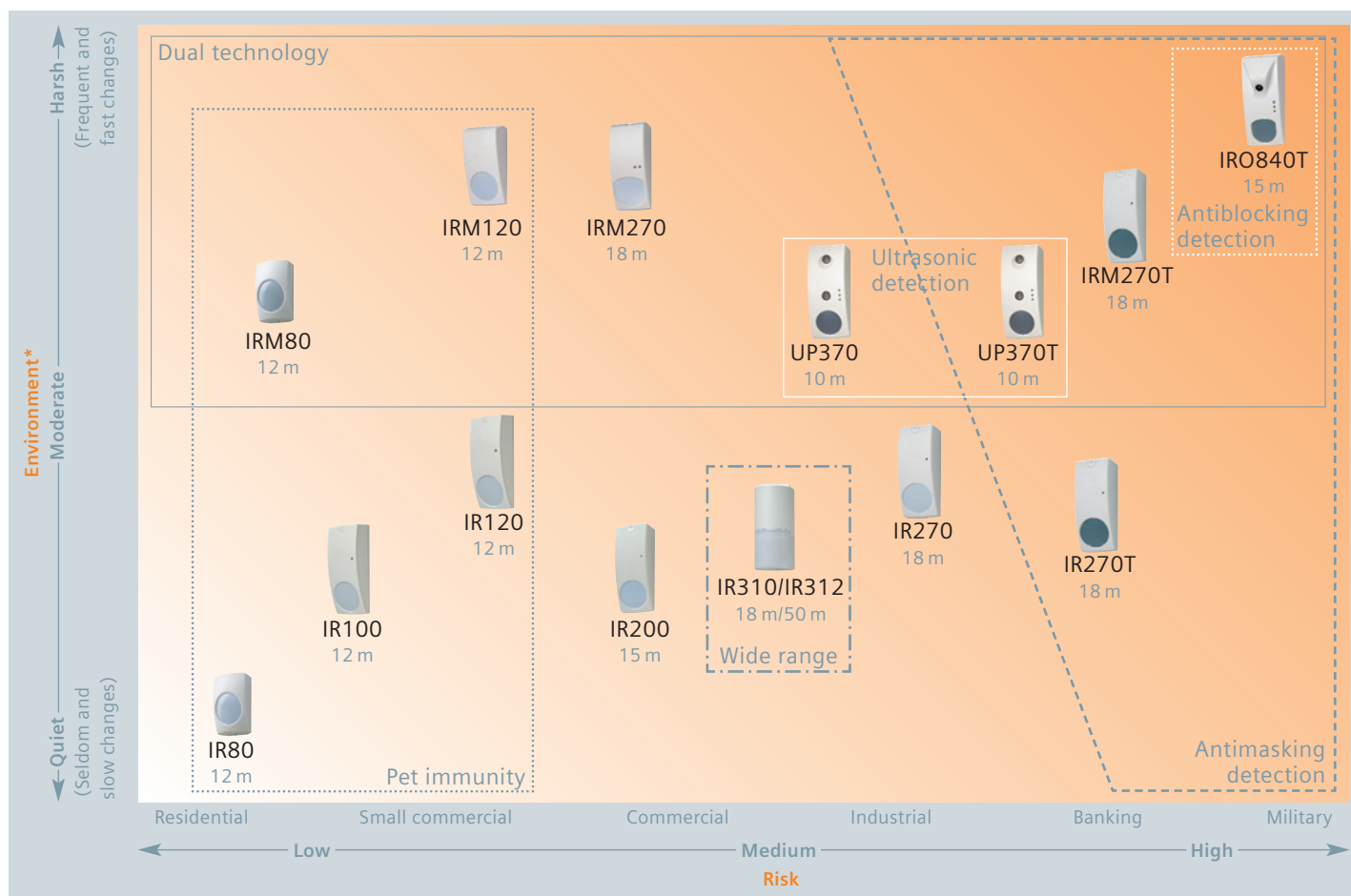
Consistent short to long range room coverage

The patented Black Triplex Mirror splits the room into a 52-zone tight grid similar to a chessboard, for outstanding detection quality and false alarm immunity.

■ The 52 sharply defined segments ensure that even small or very slow movements are reliably detected.

■ The 4x optical zoom mirror optics with adjusted focal length allow a consistent short to long range coverage of the room – as a result, objects and persons are “viewed” in their real size, regardless of their distance from the detector.

■ The black mirror coating delivers the most efficient absorption of white light, ensuring common sources of false alarms such as sunlight or car headlights are completely discarded.



* Light, temperature & humidity conditions (e.g. lights of passing cars, sun light, fax machines, heaters, air conditioning, open windows)

Welcome to the world of innovative thinking

■ Innovation

Siemens invests a great deal in both manpower and research and development. This results in a steady stream of new insights, technologies and inventions that enable us to improve the reliability of our products and systems, ensuring the securest products and making our systems even more simple and convenient to operate.

Advances in digital technologies are creating a whole new world of possibilities. Siemens is at the leading edge of progress in this field and continues to redefine both current and future technologies.

■ Reliability

With a history of over a hundred years, if you need an established, reliable partner you are in the very best of hands with Siemens. System expansions and upgrades can be continuously made over a period of years, which ensures your investment for the future.

■ Security

Siemens products and systems provide you with security. Today, tomorrow and for decades to come. That's why countless customers around the world place their trust in Siemens.



Siemens Switzerland Ltd
Building Technologies Group
International Headquarters
Gubelstrasse 22
6301 Zug
Switzerland
Tel +41 41 724 24 24
Fax +41 41 724 35 22

Siemens Building Technologies
A Division of Siemens Ltd (Australia)
885 Mountain Hwy
Bayswater, VIC, 3153
Australia
Tel +61 3 9721 2000
Fax +61 3 9720 9966

Siemens Limited
Building Technologies
Units 1006-10
10/F, China Resources Building
26 Harbour Road
Wanchai
Hong Kong
Tel +852 2870 7888
Fax +852 2407 4457

Siemens Pte Limited
Building Technologies
The Siemens Center
60 MacPherson Road
348615
Singapore
Tel +65 6490 6000
Fax +65 6490 6001

Bewator Limited
A Siemens Business
Brecon House
Llantarnam Park
Cwmbran
NP44 3AB
United Kingdom
Tel +44 871 386 0800
Fax +44 871 386 0888

The information in this document contains general descriptions of technical options available, which do not always have to be present in individual cases. The required features should therefore be specified in each individual case at the time of closing the contract.

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