



IRM270CFR

Matchtec®

PIR/MW motion detector

an ingenious combination of two technologies

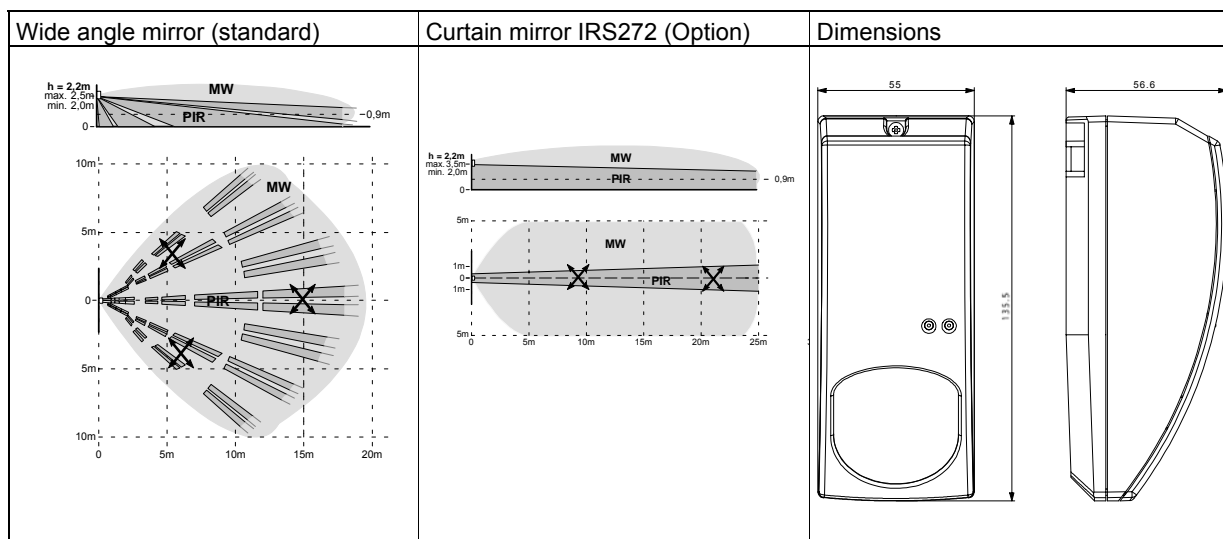
- **Digital MATCHTEC® signal processing**
- **18 m wide-angle detection with look down zone or 25 m continuous curtain (option)**
- **MW part is disengageable during unset mode**
- **Outstandig white light filter thanks to black triplex mirror optics**
- **Separate application settings for PIR and MW**

Always the right choice. The detector's design makes it easy to incorporate into any surroundings. Because two detection systems are used – microwave and passive infrared as well as the MATCHTEC® signal processing – this detector is suitable for demanding applications. It is extremely simple to adapt to the room size.

The IRM270CFR is intelligent. Reliable recognition of intruders is ensured thanks to sophisticated digital MATCHTEC® signal processing and interconnection between the microwave and passive-infrared sections. To achieve this, both subsystems are subject to a multi-criteria analysis, and any unwanted interference is recognized and suppressed by the individual subsystems.

This detector can't be fooled. A special protection concept also makes the detector insensitive to environmental problems such as draughts, temperature fluctuations, electromagnetic interference, ingress by insects or external light.

Coverage areas and dimensions



Technical data

Supply voltage	8 ... 16 VDC (12 V nom.)
– Max. ripple (0 ... 100 Hz)	2.0 VPP
– Voltage monitoring	Alarm at 7.2 ± 0.5 VDC
Current consumption (at 8 ... 16 VDC)	
– Quiescent / Alarm	7.5 mA / 13 mA
Microwave (MW)	9.9 GHz
Alarm output	
– Semiconductor relay (opens when alarm occurs)	30 VDC / 100 mA ohmic load/ $R_i < 35 \Omega$
– Alarm holding time	2 ... 3 s
Tamper contact	30 VDC / 100 mA ohmic load
Control inputs	LOW ≤ 1.5 V / HIGH ≥ 3.5 V
Walking speeds	
– Wide angle mirror / curtain mirror IRS272	0.2 ... 4.0 m/s / 0.2 ... 4.0 m/s
Signal evaluation	MATCHTEC®
Environmental conditions	
– Operating temperature	- 20 ... + 55°C
– Storage temperature	- 20 ... + 60°C
– Air humidity (EN 60721)	< 95% rH, non-condensing
– EMC up to 2 GHz	30 V/m
– Housing protection class (EN 60529, EN 50102)	IP41 / IK02

Ordering data

Type	Art. No.	Designation	Weight
IRM270CFR	A5Q00007831	PIR/MW Motion Detector	0.120 kg
IRS272	571733	Curtain mirror (4 pcs)	0.055 kg
IRUM20	562247	Mounting bracket, wall	0.100 kg
IRUM30	562250	Mounting bracket, ceiling	0.160 kg
	503251	Adhesive tamper seal	0.007 kg

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