

PROFESSIONAL CATALOGUE
ESPACE ALARM
PIR DETECTORS



121-21X DUAL-TECHNOLOGY MOTION DETECTOR



The dual-technology motion detector provides volumetric protection inside premises based on two types of detection (passive infrared and microwave) for increased reliability.

It can be used to protect premises with variable climatic conditions: air conditioning, pulsed air heating system, heat sources, etc.

It also comprises "temperature rise detection" and "freeze detection" functions.



FEATURES

◆ Ultra-reliable infrared detection

- Temperature-compensated detection sensitivity: infrared detection reliability reinforced by variations in sensitivity in relation to the ambient temperature.
- Differential-mounted double detection cell.
- SMC technology with shielding of sensitive components.
- Detection sensitivity selection (1st or 2nd edge triggering).

◆ Microwave detection

- S Band: 2.45 GHz.
- 5 detection sensitivity setting levels depending on the size of the premises to be protected.

◆ Detection coverage test

- 3 modes possible:
- infrared detection coverage test only,
 - microwave detection coverage test only,
 - combined infrared and microwave coverage test.

◆ "Temperature rise detection" function (can be configured)**

- Fire alarm triggered by:
- thermovelocimetric measurement (detection

- of abnormally fast rise in room temperature),
- thermostatic measurement (detection of temperature rise in excess of 50°C).

◆ "Freeze detection" function (can be configured)

- A technical alarm is triggered when the temperature drops below 5°C.

◆ Battery self-test

◆ Anti-tamper system

- Providing protection against opening and removal (except when detector mounted on swivel bracket).

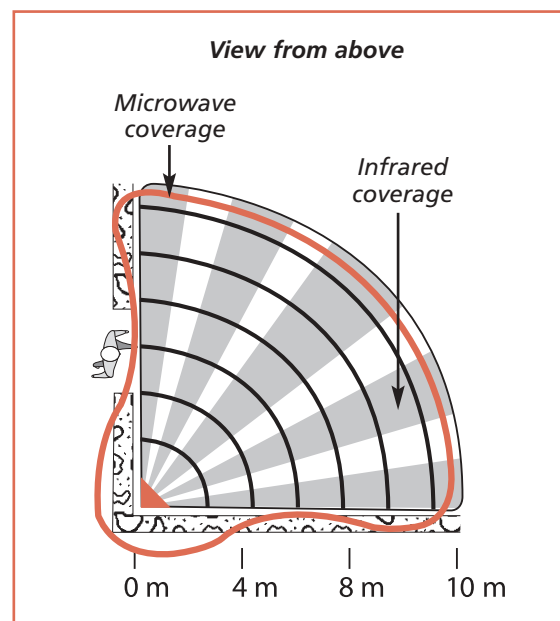
◆ 4-year battery life

- In the following conditions of use:
When the detector is activated 10 consecutive hours a day.

** not suitable for public sites subject to specific fire regulations.

TECHNICAL DATA

- ◆ Dual passive infrared and microwave detection (2.45 GHz band).
- ◆ 1 battery and detection test key.
- ◆ Test LED indicator lamps:
 - red LED for infrared detection,
 - yellow LED for microwave detection,
 - red + yellow LED for combined detection.
- ◆ Mounting: on swivel bracket, on a flat surface or in a corner.
- ◆ TwinBand®, radio transmitter*.
- ◆ Power supply via lithium battery pack (2 x 3.6V-2 Ah batteries).
- ◆ Degrees of protection: IP 31/IK 04
- ◆ Dimensions (without swivel bracket): 125 x 75 x 65 mm.
- ◆ Weight (without swivel bracket, with battery): 208 g.
- ◆ Operating temperature: -5°C to +55°C.
- ◆ For use indoors.



DETECT

171-21X wide angle
172-21X long range
173-21X curtain

COMPACT MOTION DETECTOR



The passive infrared technology motion detector provides protection inside premises. It also comprises "temperature rise detection" and "freeze detection" functions.



FEATURES

◆ Infrared detection

- 171-21X wide angle (volumetric) detector:
Suitable for protecting main rooms such as dining room, study, living room, etc.

- 172-21X long range (corridor) detector:
Suitable for protecting passageways such as corridors, stairwells, etc.

- 173-21X curtain motion detector:
Suitable for protecting vulnerable entrances such as bay windows or rooms with several entrance points.

◆ Ultra-reliable infrared detection

- Temperature-compensated detection sensitivity: infrared detection reliability reinforced by variations in sensitivity in relation to the ambient temperature.
- Differential-mounted double detection cell.
- SMC technology with shielding of sensitive components.
- Detection sensitivity selection (1st or 2nd edge triggering).

◆ "Temperature rise detection" function (can be configured)**

Fire alarm triggered by:

- thermovelocimetric measurement (detection of abnormally fast rise in room temperature),
- thermostatic measurement (detection of temperature rise in excess of 50°C).

◆ "Freeze detection" function (can be configured)

A technical alarm is triggered when the temperature drops below 5°C.

◆ Battery self-test

◆ Anti-tamper system

Providing protection against opening and removal (except when detector mounted on swivel bracket).

◆ 5-year battery life

In the following conditions of use:
When the detector is activated 10 consecutive hours a day.

** not suitable for public sites subject to specific fire regulations.

TECHNICAL DATA

- ◆ Passive infrared detection
- ◆ 1 battery and detection test key.
- ◆ 1 battery and detection test LED indicator lamp
- ◆ Mounting:
 - on a swivel bracket (supplied),
 - on a flat surface
 - or in a corner.
- ◆ TwinBand®, radio transmitter*.
- ◆ Power supply via lithium battery supplied (3.6 V-2 Ah).
- ◆ Degrees of protection: IP 31/IK 04
- ◆ Dimensions (without swivel bracket): 60 x 95 x 50 mm.
- ◆ Weight (with battery, swivel bracket and base): 115 g.
- ◆ Operating temperature: -10°C to +55°C.
- ◆ For use indoors.

171-21X

- ◆ 90° wide angle (volumetric) lens: 12 m range (*).
- ◆ 4 rows of beams, 19 beams, including 2 creeping beams.

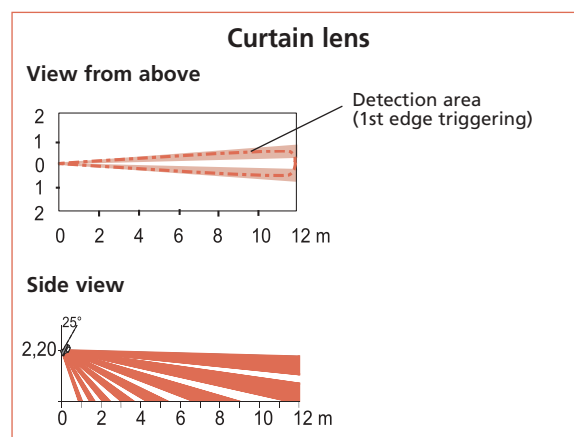
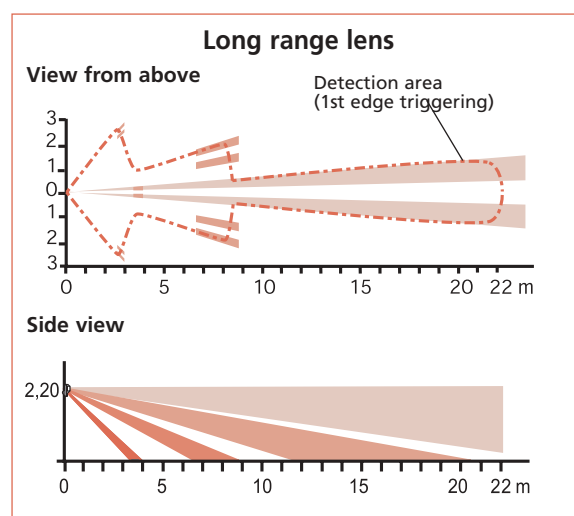
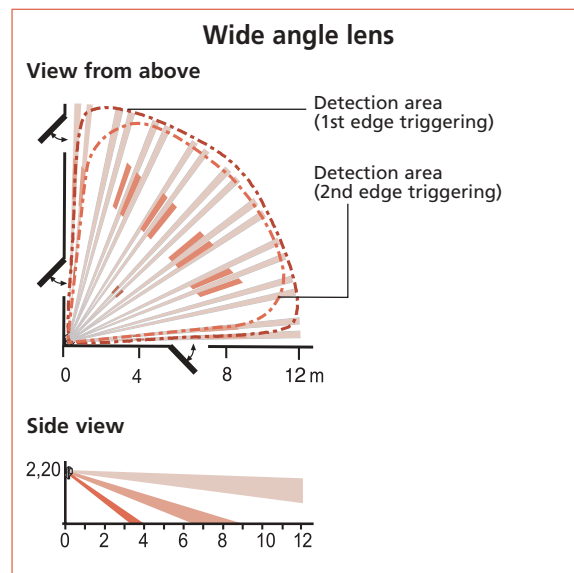
172-21X

- ◆ 10° long range (corridor) lens: 25 m range (*).
- ◆ 9 beams, including 1 creeping beam.

173-21

- ◆ 8° curtain lens: 12 m range (*).
- ◆ 9 beams, including 1 creeping beam.

- ◆ Diagrams of detection beams opposite.



(*) for an ambient temperature of 20°C

174-21X COMPACT PET-TOLERANT MOTION DETECTOR

The pet-tolerant motion detector is designed to monitor rooms even when pets are in them. It also comprises "temperature rise detection" and "freeze detection" functions.



AnimalSense®



FEATURES

◆ **Suitable for protecting rooms in the presence of pets weighing up to 12 kg**

For animals weighing between 12 kg and 25 kg, please refer to the performance chart. When there are several animals in the detection area, it is the total sum of their weight that should be taken into account.

◆ **"AnimalSense®" detection**

The detector includes a specific lens and electronic processing system enabling it to distinguish between infrared radiation emitted by a human being and that given off by a pet. This distinction is based on 2 criteria:

- a pet moves around closer to the ground than a human being,
- the infrared radiation given off by an animal is more homogeneous than that given off by a human being.

◆ **Ultra-reliable infrared detection**

- Temperature-compensated detection sensitivity: infrared detection reliability reinforced by variations in sensitivity in relation to the ambient temperature.
- Differential-mounted double detection cell.
- SMC technology with shielding of sensitive components.

◆ **"Temperature rise detection" function (can be configured)****

Fire alarm triggered by:

- thermovelocimetric measurement (detection of abnormally fast rise in room temperature),
- thermostatic measurement (detection of temperature rise in excess of 50°C).

◆ **"Freeze detection" function (can be configured)**

A technical alarm is triggered when the temperature drops below 5°C.

◆ **Battery self-test**

◆ **Anti-tamper system**

Providing protection against opening and removal (except when detector mounted on swivel bracket).

◆ **5-year battery life**

In the following conditions of use:


When the detector is activated 10 consecutive hours a day.

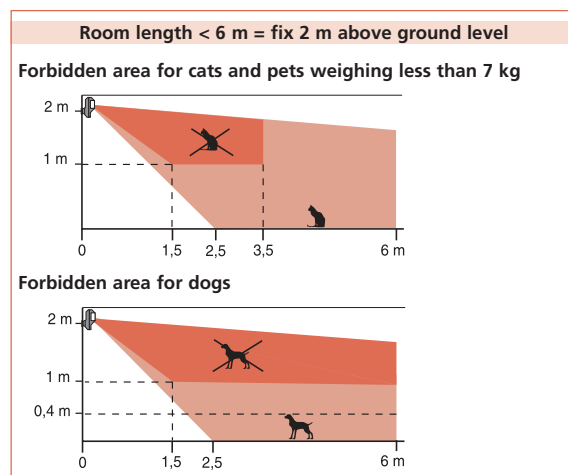
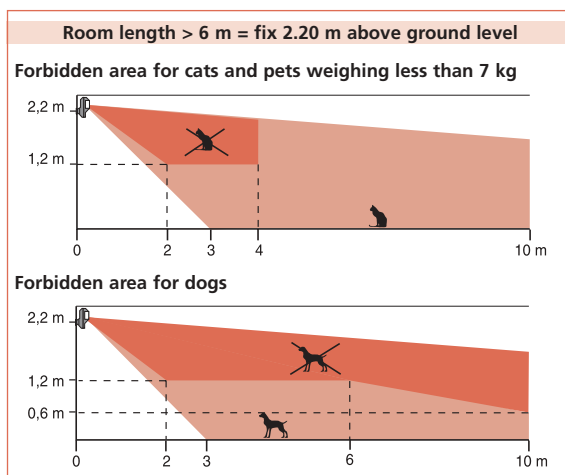
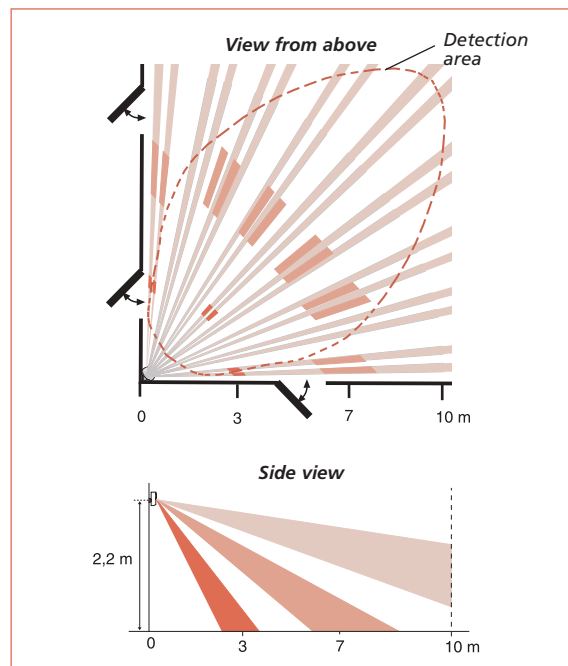
** not suitable for public sites subject to specific fire regulations.

TECHNICAL DATA

- ◆ Passive infrared detection
- ◆ 1 battery and detection test key.
- ◆ 1 battery and detection test LED indicator lamp
- ◆ Mounting: on a swivel bracket, on a flat surface or in a corner.
- ◆ TwinBand®, radio transmitter*.
- ◆ Total maximum weight of undetected animals: 12 kg (up to 25 kg depending on hair length).
- ◆ Power supply via lithium battery supplied (3.6 V-2 Ah).
- ◆ Degrees of protection: IP 31/IK 04
- ◆ Dimensions (without swivel bracket): 60 x 95 x 50 mm.
- ◆ Weight (with battery, swivel bracket and base): 115 g.
- ◆ Operating temperature: +10°C to +55°C.
- ◆ For use indoors.

Weight	Hair length		
	Long hair	Medium-length hair	Short hair
Weighing over 25 kg	DETECTOR CANNOT BE USED		
25kg	DETECTOR CAN BE USED		DETECTOR CANNOT BE USED
20 kg			DETECTOR CANNOT BE USED
12 kg	DETECTOR CAN BE USED		

 ! If there are several pets in the same room, their total weight must be taken into account according to the table above.



DETECT

141-21X wide angle
142-21X long range
143-21X curtain

EXTERNAL MOTION DETECTOR

The external infrared motion detector can detect intruders before they even break into the premises. It can be used outside in a sheltered location (discrete or full prealarm function) or inside (intrusion function) in difficult climatic environments (damp, unheated rooms like cellars, lofts, store rooms, etc.)



FEATURES

◆ Possible uses

- 141-21X detector: for protecting a 10 m x 10 m surface area.
- 142-21X detector: for protecting long and narrow areas (stairwells, external bridges, etc.), 20 m range.
- 143-21X for protecting areas close to vulnerable entrances (bay windows, doors, etc.), 10 m range.

◆ Ultra-reliable infrared detection

- Temperature-compensated detection sensitivity: infrared detection reliability reinforced by variations in sensitivity in relation to the ambient temperature.
- Differential-mounted double detection cell.
- SMC technology with shielding of sensitive components.
- Detection sensitivity selection (1st or 2nd edge triggering), for 141-21 detector only.
- Alarm selection possible: discrete prealarm, full prealarm, intrusion alarm.

◆ "Temperature rise detection" function (can be configured)**

Fire alarm triggered by:

- thermovelocimetric measurement (detection of abnormally fast rise in room temperature),
- thermostatic measurement (detection of temperature rise in excess of 50°C).

◆ "Freeze detection" function (can be configured), for indoor use only

A technical alarm is triggered when the temperature drops below 5°C.

◆ Battery self-test

◆ **Anti-tamper system:** Providing protection against opening.

◆ 5-year battery life

In the following conditions of use:

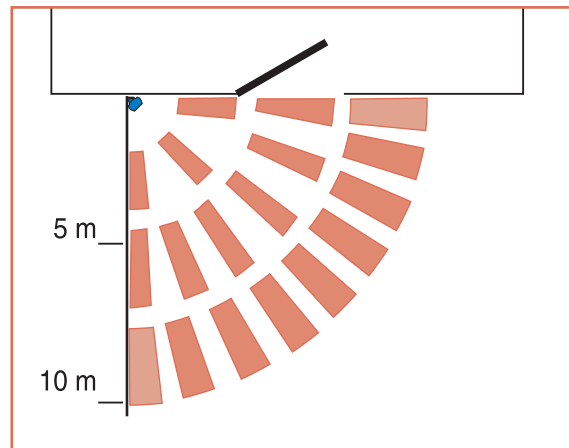
When the detector is activated 10 consecutive hours a day.

** not suitable for public sites subject to specific fire regulations.

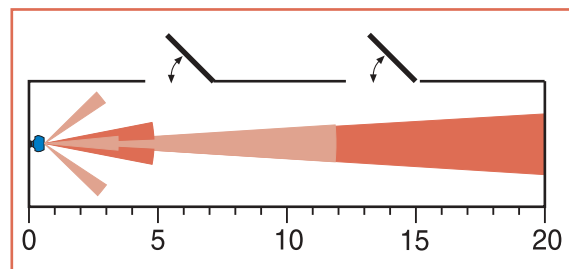
TECHNICAL DATA

- ◆ Passive infrared detection
 - 141-21X: 90° wide angle (volumetric) lens with 10 m* range,
 - 142-21X: long range lens with 20 m* range,
 - 143-21X: curtain lens with 10 m* range
- ◆ 1 battery and detection test key.
- ◆ 1 battery and detection test LED indicator lamp
- ◆ Mounting: on self-locking swivel bracket (patented) for accurate and stable fixing, on a flat surface or in a corner.
- ◆ TwinBand, radio transmitter*.
- ◆ Power supply via lithium battery pack (2 x 3.6 V-2 Ah batteries).
- ◆ Degrees of protection: IP 55/IK 04
- ◆ Dimensions (without swivel bracket): 163 x 85 x 63 mm.
- ◆ Weight (without swivel bracket, with battery): 240 g.
- ◆ Operating temperature: -25°C to +70°C.
- ◆ For use outdoors (in a sheltered location) or indoors in a difficult climatic environment (damp, unheated).
- ◆ Diagram of detection beams opposite

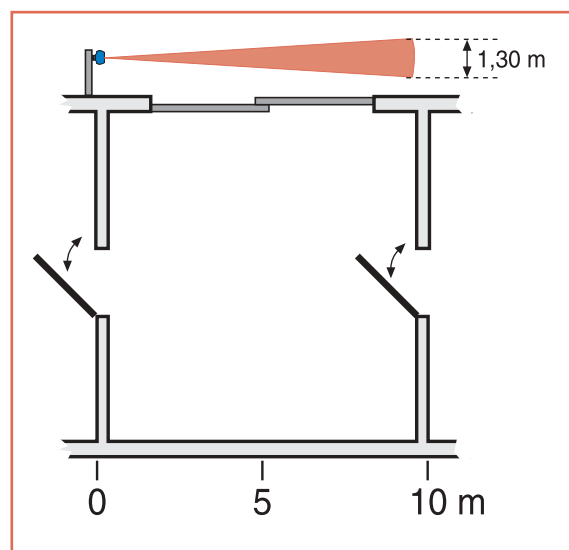
Graphic view of detection beams:



141-21X: 90° wide angle (volumetric) lens with 10 m range.



142-21X: long range (corridor) lens with 20 m range.



143-21X: curtain lens with 10 m range.

* for an ambient temperature of 20°C.