

# Lighting Control - CASAMBI

Detectors with wireless communication



IR detector



IR detector ceiling



Acoustic detector

# CASAMBI



**Extronic Elektronik**

Experts in detection since 1974

# Communication

Unique detection technology that, together with radio protocol and mesh network, controls lighting!

The detectors communicate with the fixtures via the CASAMBI radio system. All settings are made via the Casambi app where you can, for example, create different light levels for different times of the day.

With Casambi, you can save miles of cabling and get a system that can be easily changed in the future, e.g., splitting an existing space into two. This can be done without the need to install new cabling.

What is needed?



# IR detectors



## IR detector PD43 CASAMBI

Detection: **PIR**

Detection range: **40 x 40 meters**

Operating voltage: **12-24VDC, 12VAC, DALI**

Power consumption: **22mA**

Relay output: **Normally closed contact. 100 mA / 24V AC/DC**

Article no: 13223 | E-number: 13 016 21

## IR ceiling detector PDC43 CASAMBI

Detection: **PIR**

Detection range: **360°, 8.7 meters at a height of 3 meters**

Operating voltage: **12-24VDC, 12VAC, DALI**

Power consumption: **22mA**

Relay output: **Normally closed contact. 100 mA / 24V AC/DC**

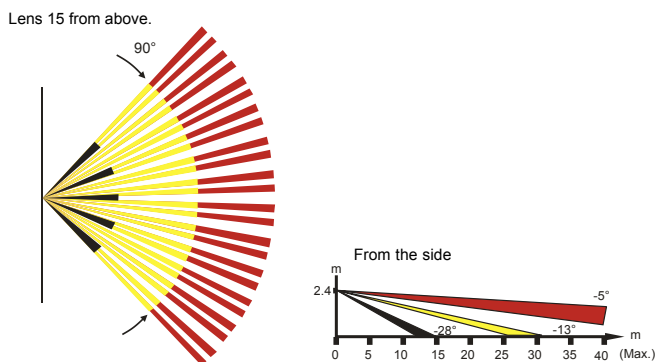
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## Applications

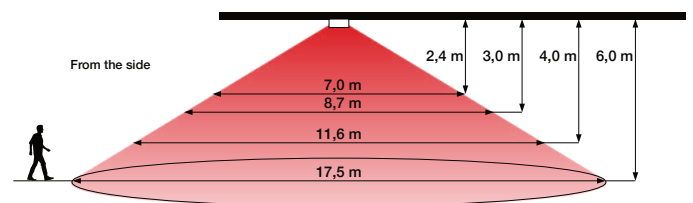
PD43/PDC43 are passive infrared detectors designed for presence detection and control of DALI and Casambi fixtures. As long as a detector is connected to the DALI bus, it can control DALI fixtures. The control of Casambi fixtures is done wirelessly via radio protocol in a mesh network.

Mesh technology where all Casambi products function as both signal amplifiers and information distributors. This means that the system is robust and allows the system to continue functioning even if a unit fails.

Detection area for PD43 with lens no. 15



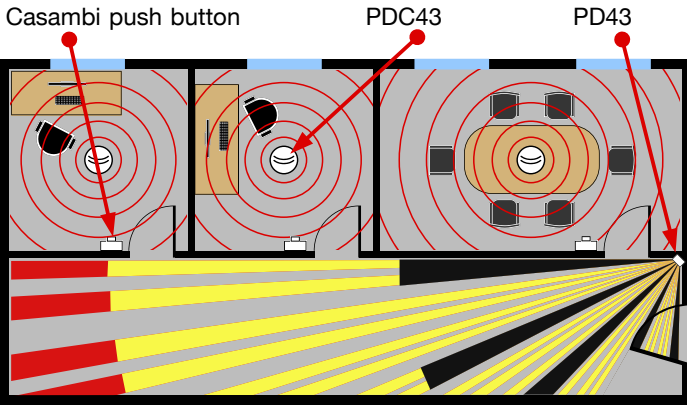
Detection area for PDC43



# Application examples with IR detection

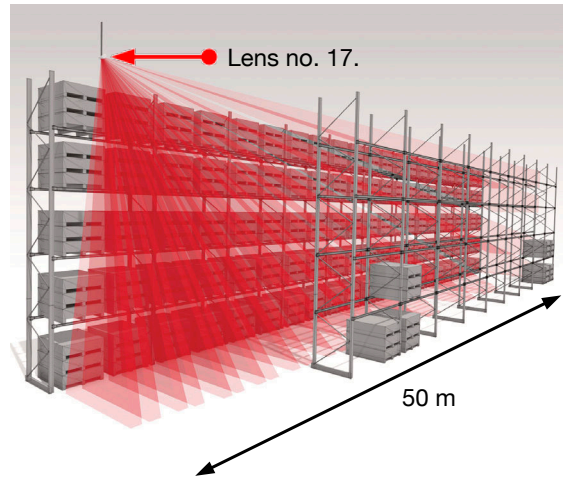
## Office spaces

In office spaces with various types of rooms and corridors, the choice of detectors is adapted depending on the layout of the rooms. In offices and conference rooms, the ceiling detector PDC43 works well and in corridors, it is better to choose the corner-mounted detector PD43.



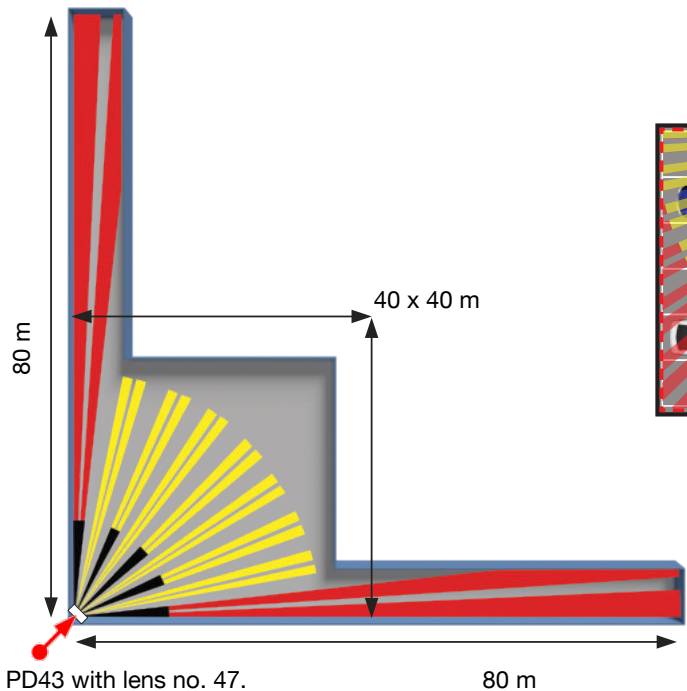
## Warehouse aisles

Lens no. 17 can detect up to 50 meters long warehouse aisles. The mounting height can be up to 25 meters.



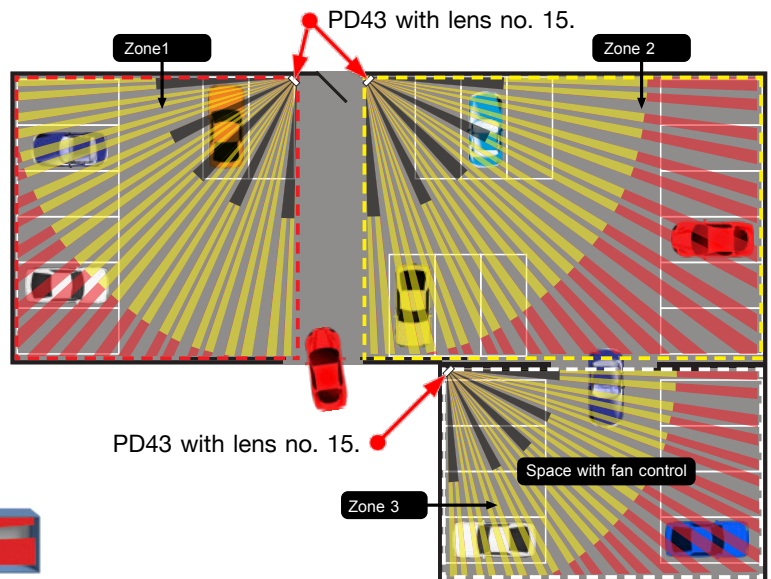
## Corridor

In corridors up to 40 meters long, the standard lens no. 15 can be used. For longer corridors, lens no. 47 can be used, and then the PD detector can reach up to 80 meters.



## Garage

With Casambi detectors, it is easy to divide a garage into different zones in the Casambi app.



## Lenses

To adapt the PD detector to the respective space, the lens can be changed. The PD detectors are delivered with standard lens no. 15. There are several different lenses available for the detector to optimize detection.

Please contact Extronic for any questions.

Number: 15	Number: 17	Number: 47	Number: 51
Number of zones: 58	Number of zones: 24	Number of zones: 28	Number of zones: 168
Angle: 90°	Angle: 100°	Angle: 90°	Angle: 104°
Max. area: 40 x 40 m	Max. area: 50 x 50 m	Max. area: 80 x 80 m	Max. area: 16 x 16 m

# Acoustic Detector AD46 CASAMBI



## Acoustic Detector AD46 CASAMBI

Detection: **Sound**

Detection range: **50 m in diameter**

Operating voltage: **12-24VDC, 12VAC, DALI**

Power consumption: **28mA**

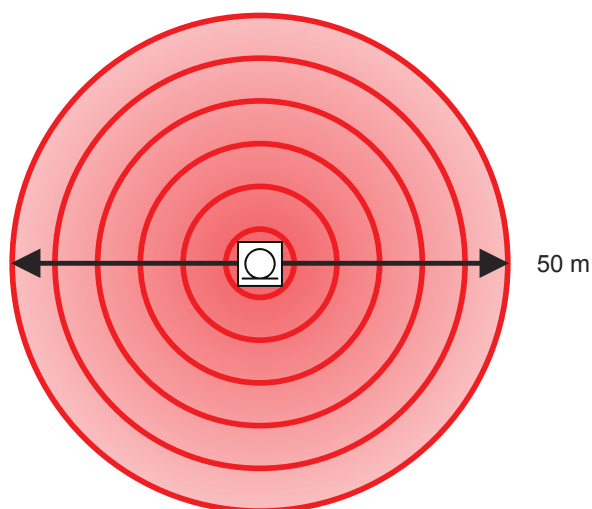
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## Features of AD46 CASAMBI

- Detection range: maximum reach 50 m in diameter depending on the space and furnishings.
- Detects door opening through pressure change (LF sound).
- Detects audible sounds (HF sound), such as speech, footsteps, key jangling, etc.
- Automatic activation via detector or manual activation via push button.
- Adjustable sensitivity.
- HF-block: only activates lighting through low-frequency sound.
- HF sound: subsequently helps to keep the lighting on.

### Detection Range

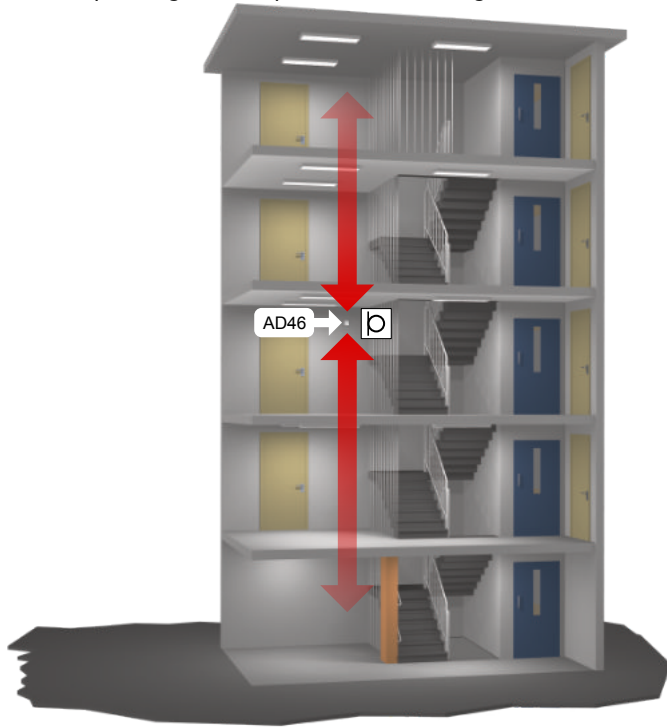
Reach up to 50 m in diameter depending on the space and furnishings.



# Application examples with acoustic detection

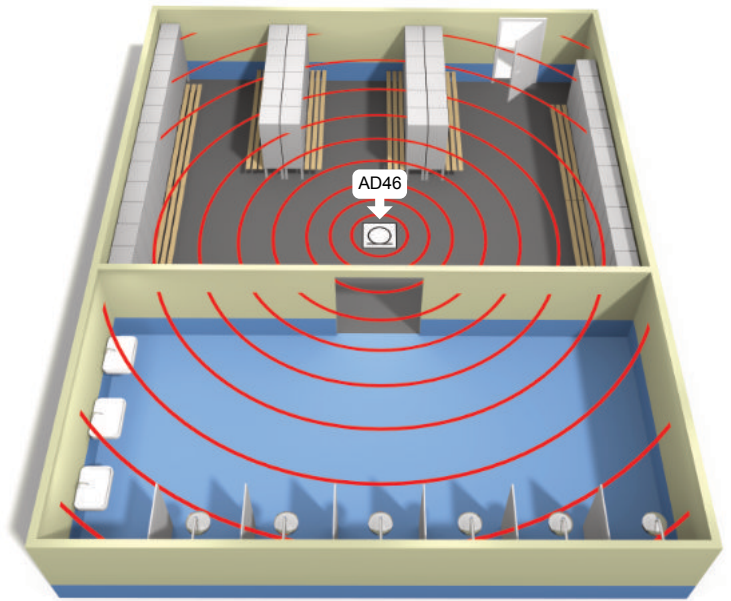
## Stairwells

Stairwells are often an enclosed space accessed through a number of doors. This makes acoustic technology advantageous, the only technology that provides illumination at the same time as the door opens. One to two acoustic detectors are normally sufficient to cover a stairwell with five floors, depending on the space and furnishings.



## Shower / Changing Rooms

Changing rooms are an excellent example of a space where acoustic technology is superior. The acoustic detector detects presence behind clothes and around lockers which an IR detector would have missed. The same detector can detect presence in both changing rooms and shower rooms.



## Basement Corridor, Attic Storage

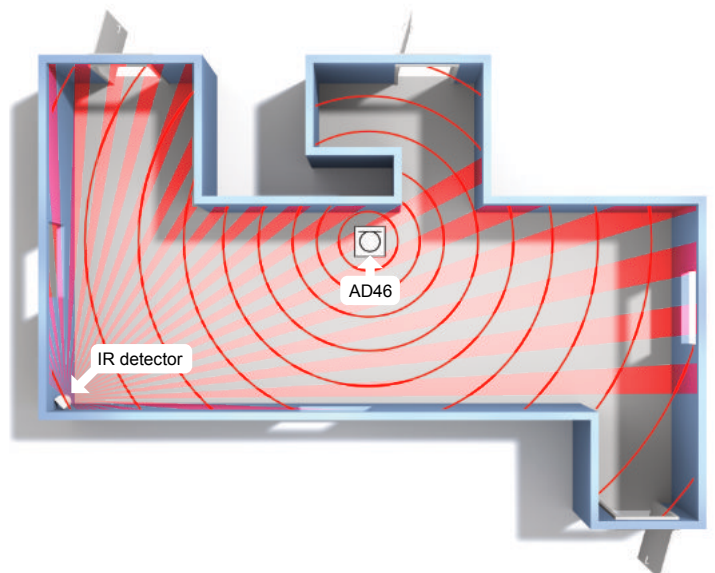
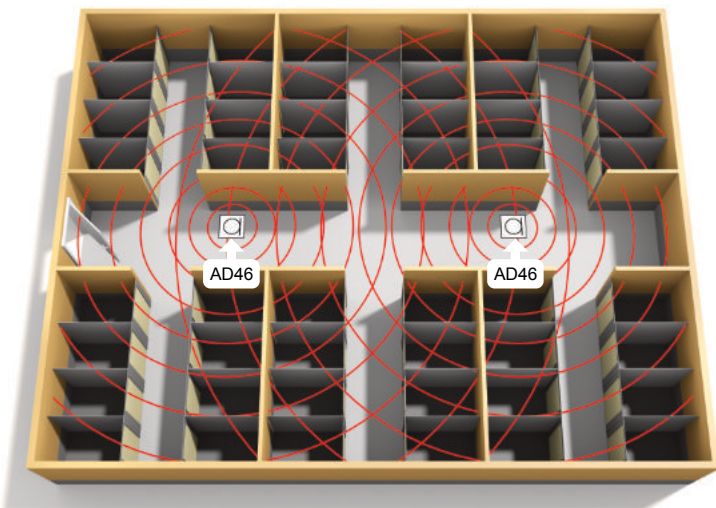
In enclosed basement and attic spaces, acoustic technology is unmatched, the only technology that provides illumination at the same time as the door to the space opens.

Presence detection also occurs into open storage areas and through grille doors.

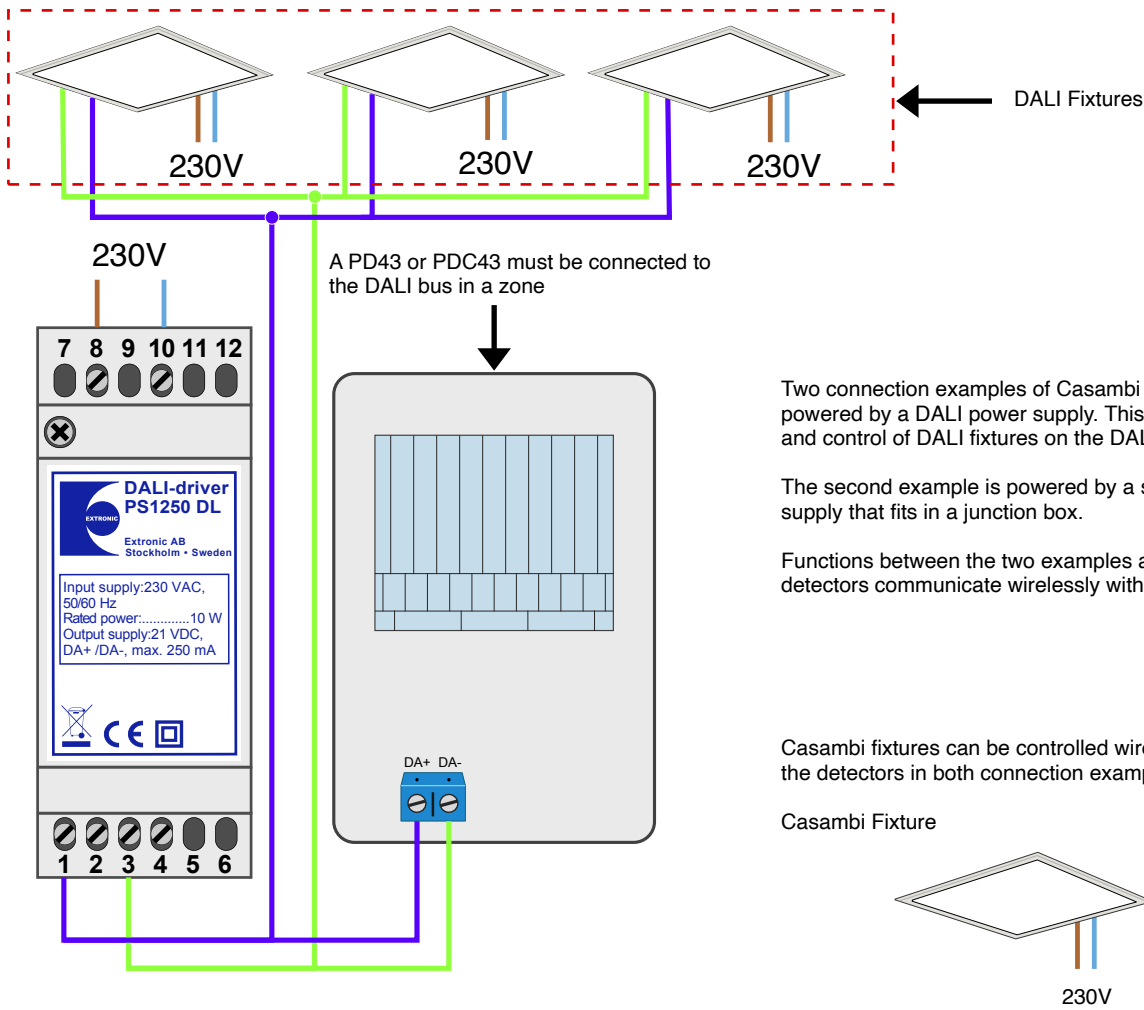
## AD46 as a Supplementary Detector

Acoustic detectors are used as supplementary detectors in combination with IR detection in, for example, corridors where one or more entrances are hidden from the IR detector.

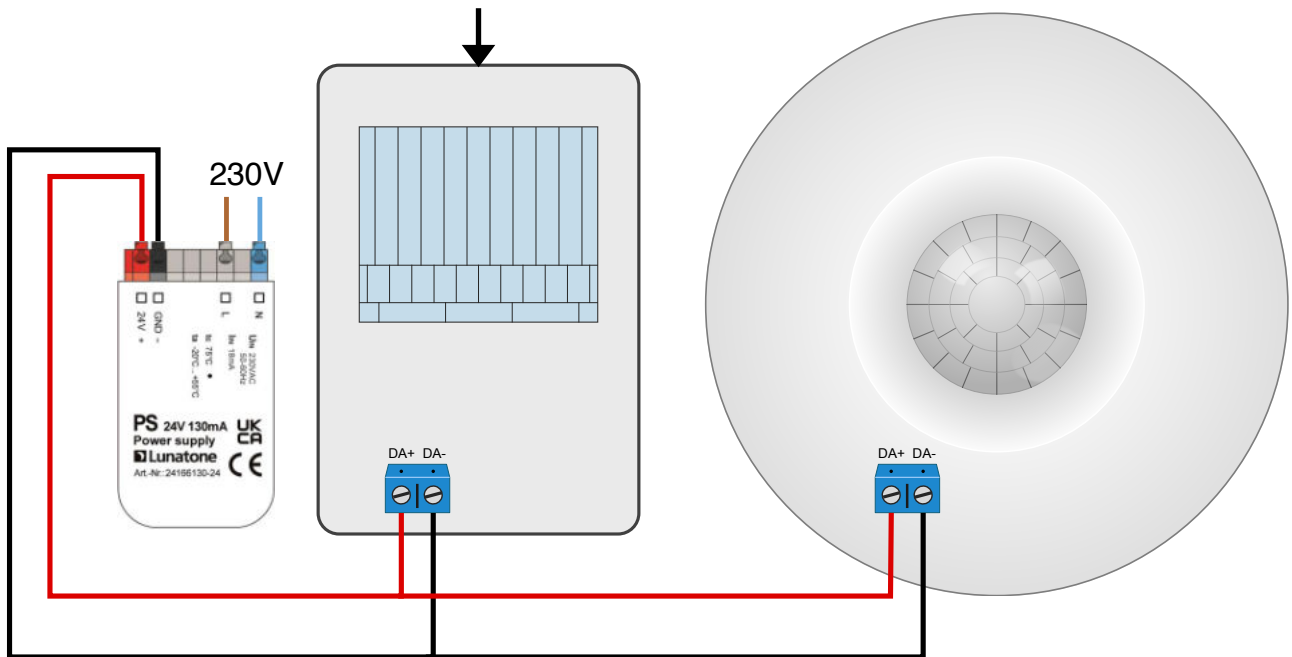
AD46 detects the low frequencies that occur when a hidden door opens and turns on the lighting. Solely acoustic detection does not always work satisfactorily, for example, due to wall-to-wall carpets that dampen the higher frequencies.



# Connection Examples



Maximum 5 PD43/PDC43 per 24V power supply





## Extronic Elektronik

Proffs på detektering sedan 1974

### We also sell these accessories



**Input Controller 4CH Casambi**  
Art. no: 13270



**24V Power Supply 130mA Lunatone**  
Art. no: 20488



**Powersupply DALI PS1250 DL**  
Art. no: 18510



**Powersupply DALI PS1251 DL**  
Art. no: 18514

### Universal Mounts

- ▶ BR1: Adjustable 30° vertically, 45° horizontally.
- ▶ BR2: When the detector needs to be tilted forward/backward for corner mounting, adjustable 30° vertically, 45° horizontally.
- ▶ BR3: For ceiling mounting, adjustable 30° vertically, 45° horizontally.

### Protection Grilles for PD Detectors

For mounting detectors on walls or in corners in exposed environments e.g., gymnastics and sports halls. There are three types of stainless steel protection grilles.

The grilles are intended for PD detectors but also fit other detectors.



BR1

Art. No: 13085



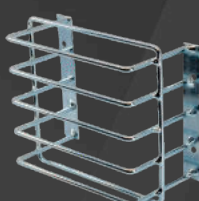
BR2

Art. No: 13086



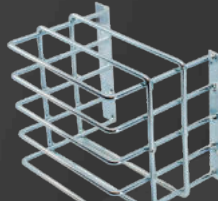
BR3

Art. No: 13087



SGV1

Art. No: 13036



SGV2

Art. No: 13037



SGV3

Art. No: 13038



SGH1

Art. No: 13039

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