Each DS9370 Series TriTech PIR/Microwave Doppler radar Motion Detector model is panoramic and uses several patented processing techniques to provide excellent catch performance with freedom from false alarms. Each model can be mounted on ceilings as high as 6.1 m (20 ft). With three separate PIR sections that are fully adjustable, the DS9370 Series provides coverage integrity at all mounting heights, plus the ability to customize the coverage for specific areas.

**Functions**

**Signal Processing**
Uses passive infrared and microwave Doppler radar technologies to provide an alarm condition when both fields of protection are simultaneously activated. Alarm signals must meet the signaling requirements of both technologies to activate an alarm.

**First Step Processing**
FSP allows virtually instant response to human targets without sacrificing false alarm immunity to other sources. By adjusting its sensitivity based upon signal amplitude, polarity, slope and timing, FSP eliminates the need for the installer to select the sensitivity level for the application. Each sensor is processed individually and both must agree there is an alarm before the alarm relay is activated.

**Microwave Noise Adaptive Processing**
Adaptive processing adjusts to background disturbances. This helps to reduce false alarms while maintaining catch performance.

**Microwave Supervision**
Patented fully supervised microwave Doppler radar provides single technology coverage in the event the microwave subsystem fails.

**Test Features**
- High efficiency LED and light-pipe system provide walk test indication that is easily viewable from any angle and at any mounting height.
- Alarm memory feature allows detector to latch the alarm LED to aid in response.
- Remote LED walk-test control allows the LED to be enabled or disabled using a switched input without accessing the detector.

**Certifications and approvals**

Australia
- DS9370: AUS C-tick
Mounting Considerations
The mounting height range is from 2.4 m to 6.1 m (8 ft to 20 ft).
These detectors can be mounted directly on the ceiling or on a standard 9 cm (3.5 in.) rectangular electrical box.
The maximum range of the detector depends on the mounting height and the vertical adjustment of the PIR coverage pattern as well as the presence or lack of microwave Doppler radar reflective materials within the coverage area. In areas where part of the area needs a targeted coverage, the optical modules can be adjusted for the correct coverage.
A masking kit containing two 120° and two 90° masks is included to allow masking unwanted areas. Apply the masks to the outside of the detector. With the supplied masks, you can mask 90°, 120°, 180°, 210°, 240°, or 330°.

Coverage Information
For UL, ULC applications, provides up to 7.0 m (23 ft) radius, 14.0 m (46 ft) diameter 360° coverage when mounted up to 6.1 m (20 ft).
For EN50131 applications, provides up to 7.0 m (23 ft) radius, 14.0 m (46 ft) diameter 360° coverage when mounted up to 5.2 m (17 ft).
For CCC applications, provides up to 8.2 m (27 ft) radius, 16.4 m (54 ft) diameter 360° coverage when mounted up to 4.9 m (16 ft).
Pattern consists of 69 zones in 21 barriers. The barriers are grouped into three groups of seven barriers each. Each group has vertical adjustment for customized coverage.

Copyright
This document is the intellectual property of Bosch Security Systems B.V. and is protected by copyright. All rights reserved.

Technical specifications

Enclosure Design

<table>
<thead>
<tr>
<th>Design</th>
<th>Modular chassis and hinged mounting base design provide easy access to field setup switches and wiring.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions</td>
<td>8.9 cm x 17.8 cm (3.5 in. x 7 in.)</td>
</tr>
<tr>
<td>Material</td>
<td>High impact ABS plastic enclosure</td>
</tr>
</tbody>
</table>

Environmental Considerations

<table>
<thead>
<tr>
<th>Operating Temperature</th>
<th>FCC: +5 °C to +50 °C (41 °F to 122°F)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CCC / CE (excluding France, UK): -10 °C to +55 °C (14 °F to 131 °F)</td>
</tr>
<tr>
<td></td>
<td>CE France: 5 °C to +40 °C (41 °F to 104 °F)</td>
</tr>
<tr>
<td>Radio Frequency Interference (RFI) Immunity</td>
<td>No alarm or setup on critical frequencies in the range from 26 MHz to 950 MHz at 50 V/m.</td>
</tr>
</tbody>
</table>
### Mounting

<table>
<thead>
<tr>
<th>Height Range</th>
<th>2.4 m to 6.1 m (8 ft to 20 ft) recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location</td>
<td>Mounts directly to ceiling or to standard 10.2 cm (3.5 in.) octagonal electrical box.</td>
</tr>
</tbody>
</table>

### Outputs

<table>
<thead>
<tr>
<th>Alarm</th>
<th>Form C Solid State relay rated at 2.8 W, 100 mA at 28 VDC for DC-resistive loads.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tamper</td>
<td>Cover and ceiling tamper. Normally Closed (with cover in place) tamper switch. Contacts rated at 28 VDC, 100 mA, 3 W maximum.</td>
</tr>
</tbody>
</table>

### Power Requirements

<table>
<thead>
<tr>
<th>Current</th>
<th>12 mA standby, 20mA in alarm. Max 24mA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage</td>
<td>9 VDC to 15 VDC</td>
</tr>
</tbody>
</table>

### Ordering information

**DS9370 Motion detector 360° ceiling mount**
Classic Line TriTech CM Motion detector, 360° ceiling mount. 10.52 to 10.55 GHz <20mW. White.
Order number **DS9370**

**DS9370E Motion detector 360° ceiling mount, EU**
Classic Line TriTech CM Motion detector, 360° ceiling mount. For use in Europe. 10.52 to 10.55 GHz <20mW. Black enclosure and lenses.
Order number **DS9370E**

**DS9370E-C Motion detector 360° ceiling mount, FR**
Classic Line TriTech CM Motion detector, 360° ceiling mount. 10.57 - 10.60 GHz. <20mW. White. For use in France only.
Order number **DS9370E-C**

**DS9370-CHI Motion detector 360° ceiling mount, CN**
Order number **DS9370-CHI**

**DS9371 Motion detector 360° ceiling black**
Classic Line TriTech CM Motion detector, 360° ceiling mount. 10.52 to 10.55 GHz <20mW. Black enclosure and lenses.
Order number **DS9371**

**DS9371E Motion detector 360° ceiling black, EU**
Classic Line TriTech CM Motion detector, 360° ceiling mount. For use in Europe. 10.52 to 10.55 GHz <20mW. Black enclosure and lenses.
Order number **DS9371E**