RADION TriTech

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- ▶ 11 m x 11 m (35 ft x 35 ft) coverage
- ▶ Pet Immunity up to 45 kg (100 lb)
- ▶ Includes battery life extension feature
- ▶ Draft and Insect immune
- ► Supervised for low-battery, cover-tamper, and removal from mounting surface tamper conditions.

RADION wireless from Bosch provides the range, scalability and exceptional battery life required to ensure reliable performance and superior quality. Advanced diagnostics and multiple device enrollment options make installation and maintenance simple and cost effective. With a complete line of peripherals, RADION provides the flexibility for virtually any application requirement.

System overview

RADION TriTech uses artificial intelligence to detect motion and provide immunity to false alarms caused by pets or animals. An integral RF transmitter reports low battery and tamper status, and sends a supervisory signal to the control panel.

Functions

Signal Processing

RADION TriTech motion detector with Pet Immunity uses both passive infrared and microwave Doppler radar technologies to provide outstanding catch performance and false alarm immunity. Alarm signals must trigger both technologies and meet the signal processing algorithm's strict requirements to generate an alarm.

PIR Signal Processing

Motion Analyzer II uses multiple thresholds and timing windows to analyze timing, amplitude, duration, and polarity of signals to make an alarm decision. The detectors tolerate extreme levels of heat and light from heaters and air conditioners, hot and cold drafts, sunlight, lightning, and moving headlights. There are three sensitivity settings.

Microwave signal processing

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

Test Features

Externally visible, tri-color alarm LED indicates each technology independently.

Pet Immunity

The detector is able to distinguish between signals caused by humans and signals caused by pets such as a dog up to 45 kg (100 lb) or two dogs at 27 kg (60 lb) or up to ten cats. This provides immunity to false alarms while maintaining proper catch performance of human targets.

Draft and Insect Immunity

The sealed optical chamber provides immunity to drafts and insects.

Temperature Compensation

The sensor adjusts its sensitivity to maintain consistent catch performance at critical temperatures.

Battery Life Extension feature (PIR and TriTech)

In the normal operating mode, an alarm can be transmitted only after three (3) minutes have passed since the previous alarm restoral. This 3 minute lockout time reduces unnecessary RF transmissions in high traffic areas, thereby extending battery life.

Certifications and approvals

Region	Certificate
US	UL 639 – Intrusion Detection Systems FCC Part 15
Europe	EN50131-1

	Region Certification	
Region		
Europe	CE	2004/108EC EMC Directive (EMC), 2006/95/EC Low-Voltage Directive (LVD), 1999/5/EC Radio equipment and Telecommunications Terminal Equip- ment (R&TTE), 2011/65/EU Restriction of the use of certain hazardous substan- ces in electrical and electronic equip- ment
USA	UL	20121217-BP1448
	FCC	Part 15 Security/Remote Control Transmitter 10.525.0 MHZ [10.525.0 MHZ]
	FCC	Part 15 Security/Remote Control Transmitter 433.42 MHZ [433.42 MHZ]
Canada	IC	1249A-RWSDFT

Installation/configuration notes

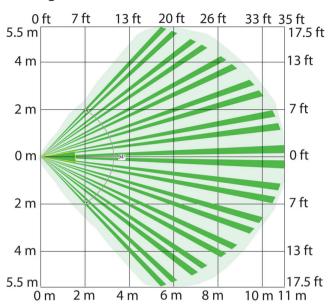
Mounting Considerations

Mounting height for the detector is between 2 m (6.5 ft) and 2.4 m (8.0 ft). When installing the detector, keep in mind that the plastics are specifically designed to allow wall tamper protection in a corner mount installation. Additional considerations include:

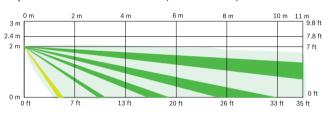
- Temporarily mount the detector using double-sided tape, and test it for both detector coverage and RF range from the desired location before mounting it permanently.
- Mount the detector where an intruder will most likely cross through the coverage pattern.
- Do not mount in areas with large metallic surfaces such as heating ducts or electrical wiring which may inhibit the sensor's RF signals from reaching the control panel receiver.
- Do not mount the detector outdoors or where direct sunlight can reach it.

 In pet immune applications, do not mount where pets can climb because the upper areas are not immune to pets.

Coverage



Top View Broad 11 m x11 m (35 ft x 35 ft)



Side view Broad 11 m x11 m (35 ft x 35 ft)

Parts included

Quantity	Component
1	Detector
4	Lithium battery (AA)
1	Hardware pack
1	Installation guide

Technical specifications

Properties

Dimensions:	138 mm x 72 mm x 64 mm (5.5 in x 2.8 in x 2.5 in)
Internal Coverage Pointability:	Vertical: -4° to -10°
Alarm Indicator	 Blue LED for TriTech alarms Green LED for microwave detection Red LED for PIR detection
Sensitivity Selection:	Field selectable for standard or intermediate sensitivity.

Power

Power/Voltage:	Four AA Alkaline batteries, 1.5 VDC (1.5 VDC x 4 batteries = 6 VDC total)
Battery life:	Up to 5 years

Environmental Considerations

Temperature: Functional range: -10°C to +49° (+14°F to +120°F) UL only: 0°C to +49°C (+32°F to +120°F) EN 50130-5 Class II only: -10°C to 40°C (+14°F to +104°F Environment Complies with EN50130-5 Class II Relative Humidity: Up to 93% non-condensing Cover and Wall Tamper Switch: Transmits a tamper switch signal when the unit is removed from its base, or the mounting surface. Frequency: 433.42 MHz Use: Intended for indoor use.		
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Cover and Wall Tamper Switch: Transmits a tamper switch signal when the unit is removed from its base, or the mounting surface. Frequency: 433.42 MHz	Environment	
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1.15425.1571	Cover and Wall Tamper Switch:	when the unit is removed from its
Use: Intended for indoor use.	Frequency:	433.42 MHz
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Compatibility

Ordering information

RFDL-11-A (433.42 MHz)

For use in North and South America
Order number **RFDL-11-A**

RFDL-11 (433.42 MHz)

For use in Europe, Africa, and Australia. Order number **RFDL-11**

RFDL-11-CHI (433.42 MHz)

For use in China only.
Order number RFDL-11-CHI

Accessories

B328 Gimbal-mount Bracket

Mounts on a single-gang box and allows rotation of a detector. Wires are hidden inside.

Represented the mber B328

Americas: B.B.338 Universal Ceiling-mounts Bracket

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seswijk de spestogen tem±45 mea.securitysystems@bosch.com www.boschsecurity.com Order number **B338** Asia-Pacific: Robert Bosch (SEA) Pte Ltd, Security

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Swiveling B335-3 low-profile mount

Swiveling, low-profile, plastic mount for wall mounting. The vertical swivel range is $\pm 10^{\circ}$ to -20° , while the horizontal swivel range is $\pm 25^{\circ}$. Available in triple packs.

Order number B335-3

China:

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