# **Wireless TriTech Motion Detector**

www.boschsecurity.com





 First Step Processing (FSP), flexible mounting height, supervised microwave, and temperature

► ZigBee HA1.2 compliant

- ▶ Draft, insect, and pet and animal immunity
- Eight detection layers including look down zones

compensation with no adjustment necessary

Externally visible LED indicates test status

The Wireless TriTech Motion Detector with ZigBee technology is a small, unobtrusive detector that is simple to install and does not require field adjustments. The detector has a dense zone pattern with 79 zones in eight layers. Passive infrared (PIR) and microwave doppler radar processing provides excellent catch performance with best-in-class false alarm immunity.

# Functions

#### **Dual detection technology**

The detectors use passive infrared and microwave doppler radar technologies to provide unsurpassed false alarm immunity. An alarm condition is generated only when both fields of protection are simultaneously activated. Alarm signals must meet the signaling requirements of both technologies to activate an alarm. The microwave range is adjustable.

### **First Step Processing**

First Step Processing (FSP) allows for instant response to human targets without sacrificing false alarm immunity to other sources. By adjusting its sensitivity based on signal amplitude, polarity, slope, and timing, FSP eliminates the need for the installer to select the sensitivity levels for the application.

#### **Microwave signal**

Microwave doppler radar noise adaptive processing adjusts to background disturbances. This helps to reduce false alarms while maintaining catch performance.

#### Supervised radar

Patented fully supervised microwave circuitry provides single technology (PIR) coverage in the event the microwave subsystem fails.

#### Pet and animal immunity

The detector is able to distinguish between signals caused by humans and signals caused by one or two animals with a combined total weight of 45 kg (100 lb). This provides resistance to false alarms while maintaining proper catch performance of human targets.

#### **Draft and insect immunity**

The sealed optical chamber reduces false alarms from drafts and insects.

#### Temperature compensation

The detector automatically monitors the ambient temperature and adjusts the signal processing to maintain proper catch performance in critical temperature ranges.

#### Home automation

ZigBee Home Automation 1.2 technology establishes a standard approach for wireless products worldwide. Home automation solutions can take advantage of a consistent wireless communication technology which offers unprecedented benefits in operational reliability, control, convenience, and security.

#### **Certifications and approvals**

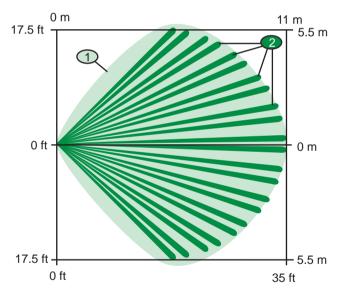
Region	Certification	
USA	cETLus	Intrusion-Detection Units, UL 639 8th Edition; Intrusion Detection Units, ULC- S306-03 2nd Edition
	Zigbee	ZIG14007ZHA25626-24
	FCC	T3X-ZIGB01
Canada	IC	1249A-ZIGB01

# Installation/configuration notes

## **Compatibility information**

Compatible with ZigBee Home Automation 1.2 compliant systems.

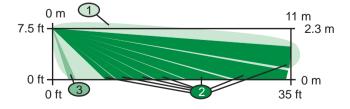
#### **Coverage patterns**



Top view broad: 11 m x 11 m (35 ft x 35 ft)

1 – Microwave coverage area

2 – PIR coverage pattern



Side view broad: 11 m x 11 m (35 ft x 35 ft)

1 – Microwave coverage area

/erage area 2 – PIR coverage pattern

3 – Look-down zone

#### Mounting considerations

# i Notice

Installation on metal surfaces can affect the RF propagation pattern of the radio transceiver.

- Mount the detector so it is aimed where an intruder will most likely cross through the coverage pattern.
- Mount the detector on interior walls where it is protected from weather elements such as rain or snow.
- Mount the detector at any height between 2.3 m and 2.7 m (7.5 ft and 9 ft).
  - On a flat wall (surface mount)
  - On a flat wall with the optional B328 Gimbalmount Bracket or B335 Swivel-Mount Bracket
  - In the junction of two perpendicular walls (corner mount)
  - On the ceiling with the optional B338 Ceiling-Mount Bracket

# i Notice

The wall tamper cannot be used in corner mount installations or with optional mounting brackets.

#### | Notice

i

The use of optional mounting brackets can reduce the detector's range and increase the dead zone areas.

• The RF range depends on building construction and other factors.

#### Parts included

Quant.	Component
1	Wireless TriTech motion detector
6	AA batteries
1	Hardware pack
1	Literature pack

#### **Technical specifications**

#### **Environmental considerations**

Environment	Indoor, dry
Relative humidity	Up to 95%, non-condensing
Temperature (operating)	0°C to +55°C (+32°F to +131°F)

#### **Mechanical properties**

Color	Bosch white
Dimensions (H x W x D)	13.3 cm x 6.7 cm x 5.5 cm (5.2 in x 2.6 in x 2.2 in)

#### Microwave characteristics

Range	11 m (35 ft)

#### **Power requirements**

Battery life	2.5 years under normal operating conditions
Battery requirements	Six AA Alkaline batteries
Recommended replacements	Duracell MN1500 or PC1500, Eveready E91, Panasonic AM-3PIX/B

#### Transmission and reception characteristics

Frequency	2.4 GHz
, ,	

#### Trademarks

All hardware and software product names used in this document are likely to be registered trademarks and must be treated accordingly.

#### **Ordering information**

#### Wireless TriTech Motion Detector

Wireless motion detectors using passive infrared and microwave processing for excellent catch performance and best-in-class false alarm resistance. Order number ISW-ZDL1-WP11G

# Accessories

#### **B338 Universal Ceiling-mount Bracket**

Swiveling plastic mount for ceiling mounting. The vertical swivel range is +7° to -16°, while the horizontal swivel range is ±45°. Order number B338

#### **B328 Gimbal-mount Bracket**

Mounts on a single-gang box and allows rotation of a detector. Wires are hidden inside. Order number B328

#### B335-3 Swiveling low-profile mount

Swiveling, low-profile, plastic mount for wall mounting. The vertical swivel range is +10° to -20°, while the horizontal swivel range is ±25°. Available in triple packs.

Order number B335-3

#### Represented by:

#### Americas:

Bosch Security Systems, Inc. 130 Perinton Parkway Fairport, New York, 14450, USA Phone: +1 800 289 0096 Fax: +1 585 223 9180 security.sales@us.bosch.com www.boschsecurity.us

Europe, Middle East, Africa: Bosch Security Systems B.V. P.O. Box 80002

Asia-Pacific: Robert Bosch (SEA) Pte Ltd, Security Systems 5617 BA Eindhoven, The Netherlands Phone: + 31 40 2577 284 11 Bishan Street 21 Singapore 573943 Phone: +65 6571 2808 Fax: +31 40 2577 330 emea.securitysystems@bosch.com www.boschsecurity.com Fax: +65 6571 2699 apr.securitysystems@bosch.com

www.boschsecurity.asia

© Bosch Security Systems 2014 | Data subject to change without notice 11699731595 | en, V4, 04. Aug 2014

China:

Bosch (Shanghai) Security Systems Ltd. 201 Building, No. 333 Fuquan Road North IBP Changning District, Shanghai 200335 China Phone +86 21 22181111 Fax: +86 21 22182398 www.boschsecurity.com.cn

#### America Latina:

Robert Bosch Ltda Security Systems Division Via Anhanguera, Km 98 CEP 13065-900 Campinas, Sao Paulo, Brazil Phone: +55 19 2103 2860 Fax: +55 19 2103 2862 latam.boschsecurity@bosch.com www.boschsecurity.com