



wLSN Dual Motion Detectors



The wLSN Dual Motion Detectors are small, unobtrusive detectors that are simple to install and do not require field adjustments. They have a dense zone pattern with 79 zones in eight layers. Passive infrared and microwave processing provides excellent catch performance with freedom from false alarms. They are available with a choice of microwave frequency:

9.350 GHz	ISW-BDL1-W11PKX
10.525 GHz	ISW-BDL1-W11PGX
10.588 GHz	ISW-BDL1-W11PHX

Functions

Signal Processing

The detectors use passive infrared and microwave 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. Microwave range is factory set, but can be adjusted.

- ▶ **First Step processing (FSP), flexible mounting height, supervised microwave, and temperature compensation with no adjustment necessary**
- ▶ **Draft, insect, and pet and animal immunity**
- ▶ **Eight detection layers including look down zones**
- ▶ **Externally-visible LED indicates test status and RF signal strength**
- ▶ **Determine suitability of chosen installation location with RF Signal Strength (RFSS) mode**
- ▶ **Supervised for low-battery, cover-tamper, and wall-tamper conditions**
- ▶ **Operates up to 3.5 years on readily-obtainable AA batteries**

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

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

Supervised Microwave

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 (99 lb). 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

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

RF Signal Strength Mode

Removing the device cover and pressing the tamper switch four times within 10 seconds of battery installation activates the RF signal strength mode. The LED lights steady for 5 sec and then begins to flash. A slow flash (approximately 1 sec on, 1 sec off) indicates insufficient signal reception. A quickly flashing LED (approximately five times as fast as the slow flash) indicates the device is receiving sufficient signal from the wLSN Hub.

Certifications and Approvals

Region	Certification	
Europe	CE	G and H models only: 1999/5/EC, IEC60950-1: 2001, EN50130-4: 1996 +A1: 1998 +A2: 2003, ETSI EN 300 220-1 V1.3.1: 2000-09, ETSI EN 300 440-1 V1.3.1 (2001-09), IEC 60950-1 : 2001 and EN 60950-1:2001 +A11 : 2004, EN55022/ANSI C63.4: 2003, EN61000-4-2: 1995 +A1: 1998 +A2: 2001, EN61000-4-3: 2002 +A1: 2003 +A2: 2005, EN61000-4-4: 1995 +A1: 2001 +A2: 2001, EN61000-4-5: 1995 +A1: 2001, EN61000-4-6: 1996 +A1: 2001 +A2: 2001 +A3: 2005, EN61000-4-11: 1994 +A1: 2001, EN60950-1:2001 +A11:2004, EN 300 440-1 V1.3.1, TS 50131-2-4:2004 (Version 1)
Belgium	INCERT	G and H models only: B-509-0059
France	AFNOR	W11PHX model: NF et A2P (NF 324 - H 58) Type 2
Sweden	INTYG	W11PHX model: 08-782

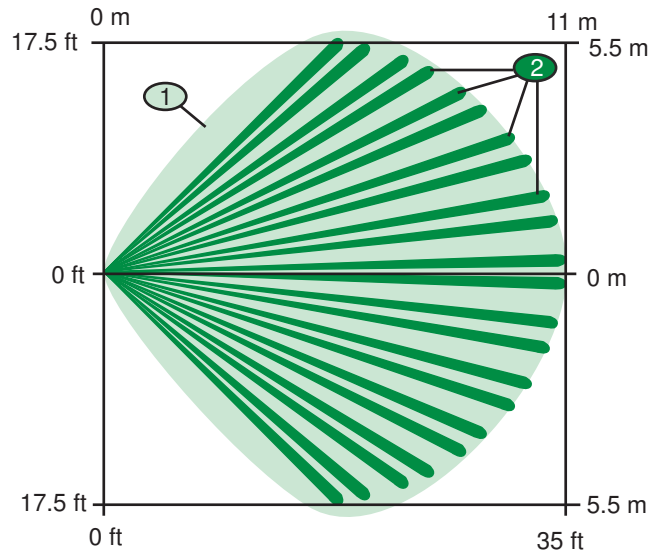
These products are designed to also comply with the requirements of EN50131-1 Grade 2, Environmental class II

Installation/Configuration Notes

Compatibility Information

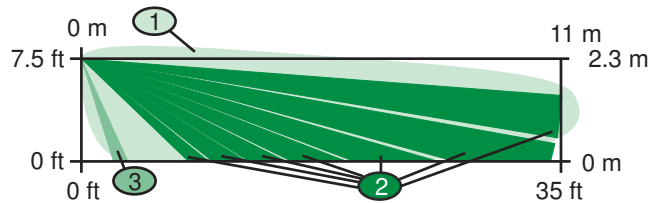
The wireless Local SecurityNetwork (wLSN) including the wLSN Dual Motion Detectors is compatible with the Easy Series Control Panel.

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
- 2 PIR coverage pattern
- 3 Look-down zone

Mounting Considerations

Note 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). The detector can be mounted:
 - On a flat wall (surface mount),
 - On a flat wall with the optional B335 Swivel-mount Bracket,
 - In the junction of two perpendicular walls (corner mount), or

- On the ceiling with the optional B338 Ceiling-mount Bracket.

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

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

- The RF transceiver has a range of approximately 1000 m (3000 ft) in open air. However, in normal operation, the actual RF range depends on building construction and other factors.

Parts Included

Quant.	Component
1	Dual motion detector
6	AA batteries (P/N: 16556)
1	Hardware pack
1	Literature pack

Technical Specifications

Environmental Considerations

Environment:	Indoor, dry
EN50131-1:	Environmental Class II
Relative Humidity:	Up to 95%, non-condensing
Temperature (operating):	-10°C to +55°C (+14°F to +131°F)

Mechanical Properties

Color:	Off-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

Frequency:	ISW-BDL1-W11PGX: 10.525 GHz ISW-BDL1-W11PHX: 10.588 GHz ISW-BDL1-W11PKX: 9.350 GHz
Range:	11 m (35 ft)

Power Requirements

Battery Power

Battery Life:	Up to 3.5 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:	European Security Band 868 MHz to 869 MHz
Range (open field):	1000 m (3000 ft)

Trademarks

Duracell® is a registered trademark of the Gillette Company, USA, in the United States and/or other countries.

Eveready® is a registered trademark of Eveready Battery Company, Inc.

Panasonic® is a registered trademark of a Matsushita Electric Industrial Co., Ltd.

Ordering Information

wLSN Dual Motion Detector (10.525 GHz) Wireless (868 MHz) motion detector uses passive infrared and microwave (10.525 GHz) for detection	ISW-BDL1-W11PGX
wLSN Dual Motion Detector (10.588 GHz) Wireless (868 MHz) motion detector uses passive infrared and microwave (10.588 GHz) for detection	ISW-BDL1-W11PHX
wLSN Dual Motion Detector (9.350 GHz) Wireless (868 MHz) motion detector uses passive infrared and microwave (9.350 GHz) for detection	ISW-BDL1-W11PKX

Accessories

Swiveling B335-3 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.	B335-3
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°.	B338

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