

# Blue Line Gen2 TriTech Motion Detectors







- ► Pet-friendly Selectable model available optimize installation for pet (45 kg [100 lb]) and non-pet applications
- ► Dynamic Temperature Compensation superior catch performance in any environment
- ► Microwave Noise Adaptive processing reduce false alarms from repetitive sources
- ► Wall to Wall Coverage superior catch performance
- ► Flexible Mounting Height, No Adjustments reduce installation time and false alarms, improve catch performance
- ► Self-locking Enclosure with Integrated Bubble
  Level reduce installation time

#### **System overview**

The Blue Line Gen2 TriTech Motion Detectors (ISC-BDL2) use a combination of passive infrared (PIR) and microwave Doppler radar detection with advanced signal processing. The pet-friendly (-WP) models generate alarms for human intruders without generating false alarms for pets. These small unobtrusive detectors are simple to install and do not need field adjustments.

#### **Functions**

## First Step Processing (FSP)

First Step Processing (FSP) almost instantly responds to human targets without producing false alarms from other sources. FSP adjusts the detector's sensitivity based on signal amplitude, polarity, slope, and timing. This eliminates the need for the installer to select the sensitivity level, thus improving ease of installation and reliability.

## Pet-friendly Selectivity (-WP models only)

The detector is defaulted with pet immunity turned on. The installer can turn pet immunity on or off based upon application requirements. When pet immunity is turned off, the detector provides superior catch performance identical to the non-pet models. When pet immunity is turned on, the detector can distinguish between signals caused by humans and signals caused by pets. It ignores signals caused by one or two pets up to 45 kg (100 lb) or numerous rodents.

#### Microwave Noise Adaptive Processing

Microwave Noise Adaptive Processing adjusts to background disturbances, reducing false alarms without sacrificing intruder detection.

#### **Dynamic Temperature Compensation**

The detector intelligently adjusts its sensitivity so that it can identify human intruders at virtually any temperature.

## Wall-to-Wall Coverage

An improved lookdown zone and coverage range of  $12 \text{ m} \times 12 \text{ m}$  (40 ft x 40 ft) provide wall-to-wall coverage.

#### **Self-locking Enclosure**

The sliding self-locking enclosure has an integrated bubble level and custom gap-free, lift-gate style terminal blocks to make installation easier.

## **Sealed Optics and Electronics**

The optics and electronics are assembled into the front enclosure and sealed with a protective cover to prevent damage during installation. The sealed optical chamber also prevents drafts and insects from affecting the detector.

#### **Test Features**

Externally visible alarm LED can be disabled after installation.

## **RFI and Impact Immunity**

E-models feature improved immunity to false alarms from external sources including radio frequency interference, "popcorn noise", as well as physical impact. Through use of a high performance pyro (infrared) sensor with integrated signal filtering, the highest quality electrical components and design that produces the best-in-class signal to noise ratio, and sophisticated signal processing, these detectors are more robust than ever against false alarms.

## Improved Resistance to Sabotage

E-model detectors are now tested and approved to the EN50131-5-3 requirements for immunity to interference from external radio frequency sources. Detection performance and false alarm immunity are ensured when in the presence of such sources that could degrade the performance of detectors that are not approved to this standard.

## **Regulatory information**

China

These detectors are also designed to comply with the following:

Europe	Complies with Directive 2002/95/EC - Restriction of the
	use of certain Hazardous Substances (RoHS)

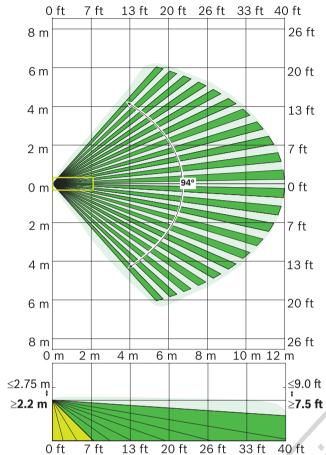
Complies with CCC GB10408.1 and GB10408.9

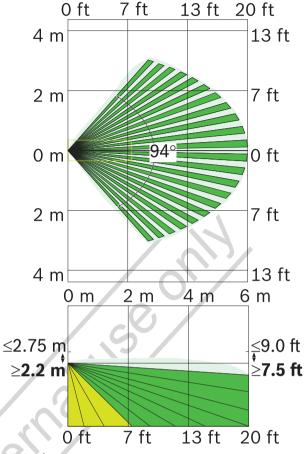
Region	Regulato	ry compliance/quality marks
Europe	CE	2014/53/EU (RED) 2011/65/EU (RoHS) (EU 2015/863 amending Annex II to Directive 2011/65/EU [Notified body 0700])   [ISC-BDL2-W12GE, ISC-BDL2-WP12GE, ISC-BDL2-WP12HE]
USA	FCC	[ISC-BDL2-W12G, ISC-BDL2-WP12G, ISC-BDL2-WP6G]
	UL	[ISC-BDL2-W12G, ISC-BDL2-WP12G, ISC-BDL2-WP6G]
	UL	20190115; UL639 – Standard for Intrusion-Detection Units
Canada	IC	[ISC-BDL2W12G, ISC-BDL2-WP12G, ISC-BDL2-WP6G]
	ULC	CAN/ULC S306-03 - Canadian Standard for Intrusion Detection Units

Region	Regulatory	compliance/quality marks
China	CSP	CSP2010031901000323
Belgium	INCERT	2800200003D1
	INCERT	B-B09-1001 ISC-BDL2-W12GE, ISC-BDL2-WP12GE
France	AFNOR	2820200003B2 ISC-BDL2-WP12HE
	AFNOR	2800200003D2 ISC-BDL2-WP12GE
	AFNOR	2800200003C2 ISC-BDL2-W12GE
	AFNOR	2820200003A2 ISC-BDL2-W12HE
Sweden	SBSC	20-43 Intyg_20-43_ISC-BDL2-W12GE_EN
	SBSC	20-44 SBSC_ISC-BDL2-WP12GE

# Installation/configuration notes

# **Coverage Patterns**





## Mounting

The recommended mounting height is 2.2 m to 2.75 m (7.5 ft to 9 ft) with no adjustments required. Mount the motion detector level, both horizontally and vertically.

# Mounting options:

- On a flat wall (surface, semi-flush), with the optional B335-3 Swiveling low-profile mount, or with the optional B328 Gimbal-mount Bracket
- In a corner (the junction of two perpendicular walls)
- On the ceiling with the optional B338 Universal Ceiling-mount Bracket

# **Technical specifications**

#### **Electrical**

Current (alarm/standby)	10 mA at 12 VDC
Voltage (operating)	9 VDC to 15 VDC

## **Environmental**

Pet Immunity <sup>1</sup>	One or two pets up to 45 kg (100 lb) or numerous rodents
Relative Humidity	0 to 95%, non-condensing  For UL Listed product installations

	0 to 85%, non-condensing
Temperature (operating)	G models = - 20°C to + 55°C (- 4°F to + 131°F)
	GE models = - 10°C to + 55°C
	HE models = + 5°C to + 40°C
	UL/ C-UL= 0°C to + 49°C (+32°F to + 120°F)

<sup>&</sup>lt;sup>1</sup> Applies to the Pet Friendly models only and only when the Pet Immunity feature is turned on.

#### Mechanical

Color		white
Dimensions		$105\mathrm{mm}\mathrm{x}61\mathrm{mm}\mathrm{x}44\mathrm{mm}$ (4.2 in. x 2.4 in. x 1.7 in.)
Material		High-impact ABS plastic
Outputs		
Relay	Solid state, supervised, Form A normally-closed (NC) contacts rated for $\leq\!100$ mA, 25 VDC, 2.5 W, $<\!20~\Omega$ closed	
Tamper	Normally-closed (NC) contacts (with cover on) rated for ≤100 mA, 25 VDC, 2.5 W  Connect tamper circuit to 24-hour protection circuit.	

## **Ordering information**

## ISC-BDL2-W12G Motion detector, 40ft (12m)

Provides PIR and microwave, 12 m x 12 m (40 ft x 40 ft) coverage. Frequency: 10.525 GHz
Order number ISC-BDL2-W12G | F.01U.134.133

F.01U.364.861 F.01U.399.618

# ISC-BDL2-WP6G Motion detector, pet friendly, 20ft (6m)

Provides Pet Friendly PIR and microwave, 6 m x 6 m (20 ft x 20 ft) coverage. Frequency: 10.525 GHz Order number ISC-BDL2-WP6G | F.01U.134.130 F.01U.364.855 F.01U.399.662

# ISC-BDL2-WP12G Motion detector, pet friendly 40ft (12m)

Provides Pet Friendly PIR and microwave, 12 m x 12 m (40 ft x 40 ft) coverage. Frequency: 10.525 GHz Order number ISC-BDL2-WP12G | F.01U.123.717 F.01U.364.820 F.01U.399.469

# BDL2-WP12G-6 Motion detector, pet 40ft (12m) 6pcs Provides Pet Friendly PIR, 12 m x 12 m (40 ft x 40 ft) coverage. Multi-pack box with 6 detectors included. Order number BDL2-WP12G-6 | F.01U.420.691

# ISC-BDL2-WP6G-CHI Motion detector, pet friendly, 20ft (6m)

Provides Pet Friendly PIR and microwave, 6 m x 6 m (20 ft x 20 ft) coverage. For use in China. Frequency: 10.525 GHz

Order number ISC-BDL2-WP6G-CHI | F.01U.134.131

# ISC-BDL2-WP12G-CHI Motion detector, pet friendly 40ft (12m)

Provides Pet Friendly PIR and microwave, 12 m x 12 m (40 ft x 40 ft) coverage. For use in China. Frequency: 10.525 GHz

Order number ISC-BDL2-WP12G-CHI | F.01U.134.145

## ISC-BDL2-W12GE Motion detector, 40ft (12m)

Provides PIR and microwave, 12 m x 12 m (40 ft x 40ft) coverage. Frequency: 10.510 to 10.580 GHz Order number ISC-BDL2-W12GE | F.01U.366.596 F.01U.418.275

## ISC-BDL2-W12HE Motion detector, 12m, FR

Provides PIR and microwave,  $12 \text{ m} \times 12 \text{ m}$  (40 ft x 40 ft) coverage. For use in France. Frequency: 10.570 to 10.610 GHz

Order number ISC-BDL2-W12HE | F.01U.366.597 F.01U.418.278

# ISC-BDL2-WP12GE Motion detector, pet friendly 40ft (12m)

Provides Pet Friendly PIR and microwave, 12 m x 12 m (40 ft x 40 ft) coverage. Frequency: 10.510 to 10.580 GHz

Order number ISC-BDL2-WP12GE | F.01U.366.598 F.01U.418.279

# ISC-BDL2-WP12HE Motion detector, pet friendly, 12m,

Provides Pet Friendly PIR and microwave, 12 m x 12 m (40 ft x 40 ft) coverage. For use in France. Frequency: 10.570 to 10.610 GHz

Order number ISC-BDL2-WP12HE | F.01U.366.601 F.01U.418.280

#### **Accessories**

## B328 Mounting bracket, gimbal

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

Order number **B328 | 4.998.800.277** 

# B335-3 Mounting bracket, swivel, low profile

Swiveling, low-profile, universal bracket for wall mounting. The vertical swivel range is  $\pm 10^{\circ}$  to  $\pm 20^{\circ}$ , while the horizontal swivel range is  $\pm 25^{\circ}$ .

Order number B335-3 | 4.998.800.014

## B338 Mounting bracket, ceiling, universal

Swiveling universal bracket for ceiling mounting. The vertical swivel range is +7° to -16°, while the horizontal swivel range is ±45°.

Order number **B338 | 4.998.800.282** 





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