# Commercial Series TriTech+ Motion Detectors with Anti-mask

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- ► Active infrared anti-mask. Detects attempts to obscure the detector's field of view
- ➤ TriTech. Passive infrared and microwave Doppler radar detection with First Step Processing for superior catch performance and best-in-class false alarm immunity
- ► Microwave Noise Adaptive Processing. Avoids false alarms from repetitive sources
- ► Integrated EOL resistors. Reduces installation time and complexity
- ► Flexible mounting height, no adjustments. Reduces installation time and false alarms, improves catch performance

The Commercial Series TriTech+ motion detectors with anti-mask are designed to ensure reliable catch performance and false alarm immunity in commercial applications. Commercial Series motion detectors use a combination of passive infrared (PIR) and microwave Doppler radar detection technologies with advanced signal processing. New features such as integrated, selectable end-of-line resistors, a self-locking enclosure with integrated bubble level, and removable lift gate style terminal strip make installation of Commercial Series detectors easier and more reliable.

## **Functions**

## **First Step Processing**

First Step Processing (FSP) almost instantly responds to intruders without producing false alarms from other sources. FSP adjusts the detector's sensitivity based on signal amplitude, polarity, slope, and timing. The sensitivity level for the Commercial Series motion detectors with anti-mask is approximately 20% higher

than in the models without anti-mask, making them more suitable for higher security applications, such as banks, jewelry stores, pharmacies, and other applications.

# Active infrared anti-mask technology

The detector utilizes two different techniques for detecting attempts to obscure the field of view of the detector; through-the-lens and bounce back.

# **Microwave Noise Adaptive Processing**

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

# Integrated jumper selectable EOL resistors

The integrated EOL resistors simplify the wiring process and reduce installation time.

# Flexible mounting heights

No adjustments required when mounted from 2.3 to 2.75m (7.5 to 9.0 ft). Reduce installation time and false alarms while improving catch performance.

# Self-locking enclosure with removable terminal strip

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

## Dynamic temperature compensation

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

#### Small animal immunity

The small animal immunity feature reduces false alarms from small animals up to 4.5 kg (10 lbs) that may move on the floor within the coverage area of the detector.

# Protected, 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.

# **Switch configuration**

The following functions are selectable using switches:

- · Alarm LED On and Off
- PIR sensitivity
- · Anti-mask On and Off

#### Wall-to-wall coverage

A user-selectable integrated lookdown zone and coverage range of 12 m to 15 m (40 ft to 50 ft), based on model chosen, provide wall-to-wall coverage.

# **Certifications and approvals**

Region	Certification	
Australia	RCM	
Europe	CE	EMC, LVD, R&TTE, RoHS [ISC-CDL1-W15G, ISC-CDL1-W15H, ISC-CDL1-WA15G, ISC-CDL1-WA15G]
	CE	EMC, LVD, R&TTE, RoHS [ISC-CDL1-W15K, ISC-CDL1-WA15K]
	EN5013 1	EN50131-2-4 Grade 3, Environmental Class II
Belgium	INCERT	BEC T 031 (1st edition 2014)
Sweden	SBSC	Alarm Class 3/4, Environmental Class II (Larmklass 3/4 miljöklass II)
USA	UL	
	UL	UL 639 - Standard for Intrusion Detection Units

Region	Certification	
	FCC	Part 15 Class B
Canada	ULC	
	ULC	CAN/ULC S306-03 - Canadian Standard for Intrusion Detection Units
	IC	Industry Canada
France	AFNOR	NF EN50131-2-4 Grade 3, Environmental Class II + RTC 50131-2-4
Brazil	ANATEL	

# Installation/configuration notes

#### Mounting

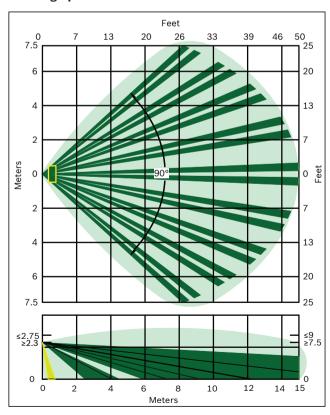
The recommended mounting height is 2.3 m to 2.75 m (7.5 ft to 9 ft) with no adjustments required.

Mount the motion detector level, both horizontally and vertically.

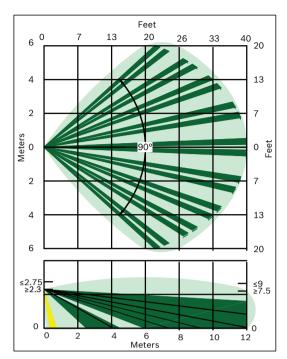
The detector can be mounted:

- In a corner by utilizing the beveled edges of the detector base.
- On a flat wall by securing the detector base directly to the wall.
- On a flat wall using the optional B328 Gimbal-mount Bracket, or B335 Swivel-mount Bracket.
- On the ceiling with the optional B338 Ceiling-mount Bracket.

# **Coverage patterns**



ISC-CDL1-WA15x 15 m x 15 m (50 ft x 50 ft) coverage



ISC-CDL1-WA12x 12 m x 12 m (40 ft x 40 ft) coverage

# **Technical specifications**

# **Properties**

Dimensions	120 mm x 70 mm x 55 mm (4.7 in. x 2.75 in. x 2.2 in.)
Material	High-impact ABS plastic
Color	White
Terminal wire size	Ø 0.40 mm to 1.29 mm (26 AWG to 16 AWG) (UL: 22 AWG to 16 AWG)

# **Environmental**

Environment	Complies with EN50130-5 Environmental Class II
Relative humidity	93% non-condensing
Temperature (operating)	-30°C to +55°C (-22°F to +130°F) UL: 0°C to +49°C (+32°F to +120°F) AFNOR/CNPP: -10°C to +55°C

# **Electrical**

Current	Standby = 15 mA (UL: Maximum current = 35 mA)
Voltage (operating)	9 VDC to 15 VDC
Radio Frequency Interference (RFI) Immunity	No alarm or setup on critical frequencies in the range from 150 kHz to 2.7 GHz at field strengths less than 10 V/m.

# **Outputs**

Alarm relay, trouble relay	Solid state, supervised, normally- closed (NC) contacts rated for <100 mA, 25 V, 2.5W
Tamper	Supervised, normally-closed (NC) contacts rated for <100 mA, 25 V, 2.5W
End-of-line resistors	Alarm: 1.0 k, 2.2 k Tamper: 1.0 k, 2.2 k, 33 k Trouble: 2.2 k, 12 k

# **Ordering information**

# ISC-CDL1-WA15G Commercial Series TriTech+ Motion Detector with Anti-mask

Provides PIR and microwave Doppler radar detection,  $15\ m\ x\ 15\ m$  (50 ft x 50 ft) coverage pattern, and antimask detection. Frequency:  $10.525\ GHz$ 

Order number ISC-CDL1-WA15G

# ISC-CDL1-WA15G-CHI Commercial Series TriTech+ Motion Detector with Anti-mask

Provides PIR and microwave Doppler radar detection, 15 m x 15 m (50 ft x 50 ft) coverage pattern, and antimask detection. Frequency: 10.525 GHz. For use in China.

Order number ISC-CDL1-WA15G-CHI

# ISC-CDL1-WA15H Commercial Series TriTech+ Motion Detector with Anti-mask

Provides PIR and microwave Doppler radar detection,  $15 \text{ m} \times 15 \text{ m}$  (50 ft x 50 ft) coverage pattern, and antimask detection. Frequency: 10.588 GHz. For use in France and the United Kingdom.

Order number ISC-CDL1-WA15H

# ISC-CDL1-WA15K Commercial Series TriTech+ Motion Detector with Anti-mask

Provides PIR and microwave Doppler radar detection,  $15 \text{ m} \times 15 \text{ m}$  (50 ft x 50 ft) coverage pattern, and antimask detection. Frequency: 9.350 GHz. For use in Germany, Austria, and Switzerland.

Order number ISC-CDL1-WA15K

# ISC-CDL1-WA12G Commercial Series TriTech+ Motion Detector with Anti-mask

Provides PIR and microwave Doppler radar detection,  $12\ m\ x\ 12\ m$  (40 ft x 40 ft) coverage pattern, and antimask detection. Frequency:  $10.525\ GHz$ 

Order number ISC-CDL1-WA12G

# ISC-CDL1-WA12G-CHI TriTech+ Motion Detector with Anti-mask

Provides PIR and microwave Doppler radar detection, 12 m x 12 m (40 ft x 40 ft) coverage pattern, and antimask detection. Frequency: 10.525 GHz. For use in China.

Order number ISC-CDL1-WA12G-CHI

# ISC-CDL1-WA12H Commercial Series TriTech+ Motion Detector with Anti-mask

Provides PIR and microwave Doppler radar detection, 12 m x 12 m (40 ft x 40 ft) coverage pattern, and antimask detection. Frequency: 10.585 GHz Order number ISC-CDL1-WA12H

#### Accessories

## **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, universal bracket for wall mounting. The vertical swivel range is +10° to -20°, while the horizontal swivel range is ±25°.

Order number **B335-3** 

# **B338 Universal Ceiling-mount Bracket**

Swiveling universal bracket for ceiling mounting. The vertical swivel range is  $\pm 7^{\circ}$  to  $\pm 16^{\circ}$ , while the horizontal swivel range is  $\pm 45^{\circ}$ .

Order number B338

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