

# Commercial Series TriTech Motion Detectors

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Invented for life



- ▶ Cloak and Camouflage Detection Technology (C<sup>2</sup>DT)
- ▶ Flexible Mounting Height, No Adjustments – reduce installation time and false alarms, improve catch performance
- ▶ Integrated EOL resistors. Reduces installation time and complexity
- ▶ 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 – reduce false alarms from repetitive sources

The Commercial Series TriTech motion detectors are designed to ensure reliable catch performance and false alarm immunity in commercial applications. ISC-CDL1-W15x 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 installer can select the sensitivity level, thus improving reliability.

### 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 bi-axial 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.

**Cloak and Camouflage Detection Technology**

Cloak and Camouflage Detection Technology (C<sup>2</sup>DT) maximizes catch performance against intruders attempting to cover their infrared signal.

**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
- C<sup>2</sup>DT HI and LO

**Wall-to-wall coverage**

A user-selectable integrated lookdown zone and coverage range of 15 m x 15 m (50 ft x 50 ft) provide wall-to-wall coverage.

**Certifications and approvals**

Region	Regulatory compliance/quality marks	
Australia	RCM	[ISC-CDL1-W15G, ISC-CDL1-WA15G, ISC-CDL1-WA12G]
USA	UL	[ISC-CDL1-WA12G, ISC-CDL1-WA15G, ISC-CDL1-W15G]
	UL	UL 639 - Standard for Intrusion Detection Units
Canada	ULC	[ISC-CDL1-WA12G, ISC-CDL1-WA15G, ISC-CDL1-W15G]
	ULC	CAN/ULC S306-03 - Canadian Standard for Intrusion Detection Units
	IC	Industry Canada
China	CCC	2015031901000145 [ISC-CDL1-WA12G-CHI, ISC-CDL1-W15G-CHI, ISC-CDL1-WA15G-CHI]
Brazil	ANATEL	[ISC-CDL1-W15G, ISC-CDL1-WA15G]

**Installation/configuration notes**

**Mounting**

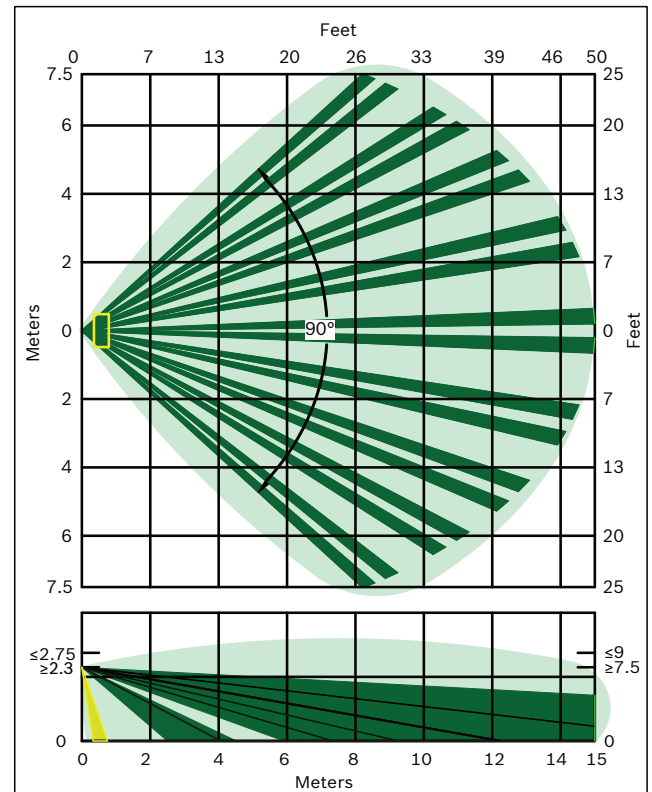
The recommended mounting height is 2.3 m to 2.75 m (7.5 ft to 9 ft) with no adjustments required.

Mount the motion detector level, both horizontally and vertically.

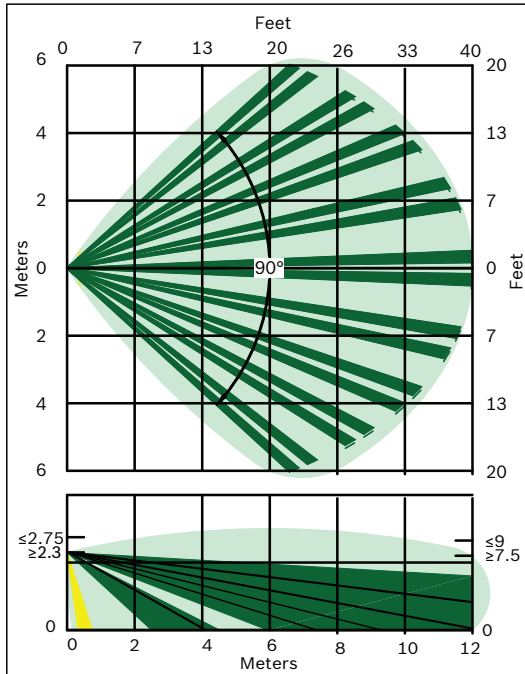
The detector can be mounted:

- 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)

#### Electrical

Current	Standby = 10 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

### Ordering information

#### ISC-CDL1-W15G Motion detector, 50ft (15m)

Provides PIR and microwave Doppler radar detection, 15 m x 15 m (50 ft x 50 ft) coverage pattern.  
Frequency: 10.525 GHz.  
Order number **ISC-CDL1-W15G**

#### ISC-CDL1-W15G-CHI Motion detector, 50ft (15m)

Provides PIR and microwave Doppler radar detection, 15 m x 15 m (50 ft x 50 ft) coverage pattern.  
Frequency: 10.525 GHz. For use in China.  
Order number **ISC-CDL1-W15G-CHI**

#### ISC-CDL1-W15H Motion detector, 50ft (15m), 10.588GHz

Provides PIR and microwave Doppler radar detection, 15 m x 15 m (50 ft x 50 ft) coverage pattern.  
Frequency: 10.588 GHz. For use in France and the United Kingdom.  
Order number **ISC-CDL1-W15H**

#### ISC-CDL1-W15K Motion detector, 50ft (15m), 9.350GHz

Provides PIR and microwave Doppler radar detection, 15 m x 15 m (50 ft x 50 ft) coverage pattern.  
Frequency: 9.350 GHz. For use in Germany, Austria, and Switzerland.  
Order number **ISC-CDL1-W15K**

#### Accessories

##### B328 Mounting bracket, gimbal

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

##### B335-3 Mounting bracket, swivel, low profile

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 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**

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