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 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 m x 12 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.

Certifications and approvals
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)

China
Complies with CCC GB10408.1 and GB10408.9

<table>
<thead>
<tr>
<th>Region</th>
<th>Regulatory compliance/quality marks</th>
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<tbody>
<tr>
<td></td>
<td>EN50131-2-4 Grade 2 Environmental Class II (G models)</td>
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<td></td>
<td>ANPHID-0004-0002 ISC-BDL2-W12GE, ISC-BDL2-WP12GE</td>
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<td>SBSC 20-44 SBSC ISC-BDL2-WP12GE</td>
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<td>UL 20190115; UL639 – Standard for Intrusion-Detection Units</td>
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<tr>
<td>Canada</td>
<td>ULC CAN/ULC S306-03 - Canadian Standard for Intrusion Detection Units</td>
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</table>

Installation/configuration notes
Coverage Patterns

![Coverage Patterns Diagram](image)
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

<table>
<thead>
<tr>
<th><strong>Electrical</strong></th>
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<tbody>
<tr>
<td>Current (alarm/standby)</td>
<td>10 mA at 12 VDC</td>
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<tr>
<td>Voltage (operating)</td>
<td>9 VDC to 15 VDC</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Environmental</strong></th>
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<tbody>
<tr>
<td>Pet Immunity</td>
<td>One or two pets up to 45 kg (100 lb) or numerous rodents</td>
</tr>
<tr>
<td>Relative Humidity</td>
<td>0 to 95%, non-condensing</td>
</tr>
</tbody>
</table>

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)

1 Applies to the Pet Friendly models only and only when the Pet Immunity feature is turned on.

**Mechanical**

<table>
<thead>
<tr>
<th><strong>Color</strong></th>
<th>white</th>
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<tbody>
<tr>
<td><strong>Dimensions</strong></td>
<td>105 mm x 61 mm x 44 mm (4.2 in. x 2.4 in. x 1.7 in.)</td>
</tr>
<tr>
<td><strong>Material</strong></td>
<td>High-impact ABS plastic</td>
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**Outputs**

| **Relay** | Solid state, supervised, Form A normally-closed (NC) contacts rated for ≤100 mA, 25 VDC, 2.5 W, <20 Ω 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

**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

**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

**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

**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

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

**ISC-BDL2-W12HE Motion detector, 12m, FR**  
Provides 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-W12HE

**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

**ISC-BDL2-WP12HE Motion detector, pet friendly, 12m, FR**  
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

### 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