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# Quick Selection Guide Intrusion Detectors

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Detection you can depend on



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# Overview

## Detection you can depend on

Whatever the property size you're securing, you need motion detectors that offer instant responses to intruders and the highest level of immunity from costly false alarms. Building upon the Bosch tradition of quality and innovation, our latest TriTech motion detectors feature dual motion technology to perfectly balance best-in-class catch performance while virtually eliminating false alarms. All Bosch motion detectors are sold globally and comply with necessary rules and regulations, including the stringent Radio Equipment Directive (R-ED) requirements placed on the EU market.

## Raising the bar for reliability and rapid detection

All Bosch motion detectors use high quality optics to achieve the best coverage pattern for an area and our unique First Step Processing technology instantly responds to the first step of a person without producing false alarms from other sources. Bosch TriTech motion detectors raise the bar even further when it comes to superior catch performance and fewer false alarms under a variety of environmental conditions. These detectors make use of a combination of PIR and microwave Doppler radar detection technologies with advanced signal processing.

- First Step Processing technology delivers an instant response to the first step of a person without producing false alarms from other sources. When someone walks across the detector's field of view, the sensor detects a sharp increase in infrared energy and triggers an alarm.
- Dynamic temperature compensation automatically adjusts the detector's sensitivity so that it can identify a person at virtually any temperature. If the sun has been shining through a window all day raising the temperature

of the room to 37°C and someone enters the room, the sensor will compensate to detect this change and an alarm is triggered.

- Microwave Noise Adaptive Processing differentiates humans from repetitive false alarm sources such as vibrating machinery, air conditioning and heating systems, as well as ceiling fans. Featured in our TriTech detectors, it adjusts for background disturbances, further reducing false alarms without sacrificing the ability to detect an intruder.
- Selectable pet and small animal immunity also provides optimal sensitivity for any application. When activated on certain models, nuisance alarms from animals up to 45 kg are minimized.

## Easy to install and built to last

All Bosch motion detectors are designed with unique features that speed up installation by as much as 45% compared to models from other manufacturers. These features also reduce installer errors that can lead to false alarms or missed detection, thus reducing service calls.

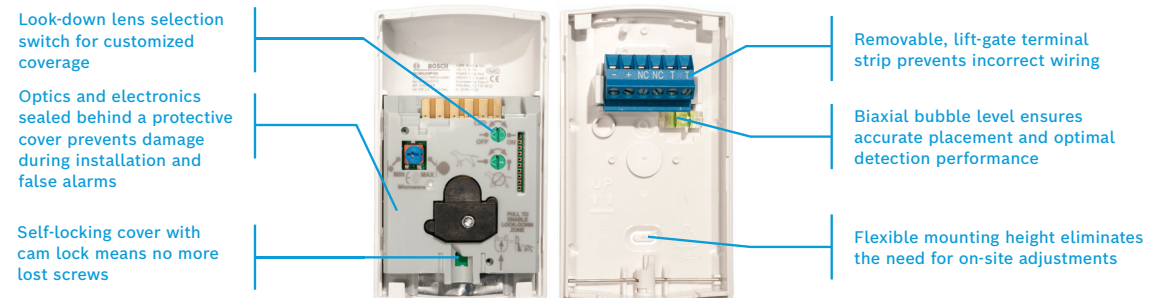
Defective security products can be costly to repair or replace. That's why Bosch exceeds the most stringent requirements to ensure our products are recognized for their superior reliability and durability. Specifically, our high quality optics and electronics are built to last with a mean time of 100 years between failures.

## Extended warranty

With the relaunch of our TriTech motion detectors in EMEA, we increased the warranty for TriTech E model detectors from 5 to 8 years, which is above the industry average warranty. This stands as proof of our commitment to bring to market TriTech motion detectors that not only comply with regulations, but also meet the highest quality and reliability standards.




## Our commitment

Our intrusion alarm systems together with our access control and video security systems are key to our integrated security offering and supports our strategy to help our customers create a more secure world and deliver business intelligence that goes even beyond security.






To find out more go to [www.boschsecurity.com](http://www.boschsecurity.com)

## Residential, commercial and high security

		Residential and small commercial – Blue Line Gen2 Series		
Material description		Standard PIR	Pet Friendly PIR	Quad PIR
Commercial type number (CTN)		ISC-BPR2-W12	ISC-BPR2-WP12	ISC-BPQ2-W12
				
Overview	Application risk level	Low to moderate risk	Low to moderate risk	Moderate risk
	Environment*	Standard	Standard	Difficult
Specifications	Coverage/range	12 x 12 m	12 x 12 m	12 x 12 m
	Mounting height	2.2 to 2.75 m	2.2 to 2.75 m	2.2 to 2.75 m
	Operating temperature**	-30° to 55° C	-30° to 55° C	-30° to 55° C
	Operating voltage	9 to 15 VDC	9 to 15 VDC	9 to 15 VDC
	Current draw (typical)	10 mA	10 mA	10 mA
Features	First step processing	■	■	■
	Sensor Data Fusion	–	–	–
	Dynamic temperature compensation	■	■	■
	Wall-to-wall coverage	■	■	■
	Look-down zone	■	■	■
	Pet/small animal immunity	4.5 kg	20 kg	4.5 kg
	Alarm output	NC	NC	NC
	Alarm memory	–	–	–
	Active white light supression	–	–	–
	Tamper	Cover	Cover	Cover
	Sealed optical chamber	■	■	■
	Cloak and Camouflage Detection Technology (C <sup>2</sup> DT)	–	–	–
Ease of Installation***	No-adjust installation	■	■	■
	Enable/disable LED	■	■	■
	Enable/disable pet immunity	–	■	–
	Enable/disable look-down	■	■	■
	Long/short select range	–	–	–
	Remote walk test	–	–	–
	Remote self test	–	–	–
Certifications		AFNOR, CCC, CE, EN50131-2-2 Grade 2, INCERT, UL	AFNOR, CCC, CE, EN50131-2-2 Grade 2, INCERT, UL	AFNOR, CCC, CE, EN50131-2-2 Grade 2, INCERT, UL

■ Available – Not available




## Residential, commercial and high security

Material description		Residential and small commercial – Blue Line Gen2 Series		Large commercial and high security – Professional Series
Commercial type number (CTN)		Standard TriTech	Pet Friendly TriTech	Standard PIR
		ISC-BDL2-W12x	ISC-BDL2-WP12x	ISC-PPR1-W16
				
Overview	Application risk level	Low to moderate risk	Low to moderate risk	Moderate risk
	Environment*	Difficult	Difficult	Standard
Specifications	Coverage/range	12 x 12 m	12 x 12 m	16 x 21 m / 8 x 10 m
	Mounting height	2.2 to 2.75 m	2.2 to 2.75 m	2.1 to 3 m
	Operating temperature**	-30° to 55° C	-30° to 55° C	-29° to 55° C
	Operating voltage	9 to 15 VDC	9 to 15 VDC	9 to 15 VDC
	Current draw (typical)	10 mA	10 mA	10 mA
	First step processing	■	■	–
Features	Sensor Data Fusion	–	–	■
	Dynamic temperature compensation	■	■	■
	Wall-to-wall coverage	■	■	–
	Look-down zone	■	■	■
	Pet/small animal immunity	4.5 kg	45 kg	4.5 kg
	Alarm output	NC	NC	NC
	Alarm memory	–	–	■
	Active white light supression	–	–	■
	Tamper	Cover	Cover	Cover + wall
	Sealed optical chamber	■	■	■
	Cloak and Camouflage Detection Technology (C <sup>2</sup> DT)	–	–	■
Ease of Installation***	No-adjust installation	■	■	■
	Enable/disable LED	■	■	–
	Enable/disable pet immunity	–	■	–
	Enable/disable look-down	■	■	■
	Long/short select range	–	–	■
	Remote walk test	–	–	■
	Remote self test	–	–	■
Certifications		AFNOR, CCC, CE, EN50131-2-4 Grade 2, FCC, IC, UL	AFNOR, CCC, CE, EN50131-2-4 Grade 2, FCC, IC, UL	AFNOR, CCC, CE, EN50131-2-2 Grade 2, FCC, IC, INCERT, UL

■ Available – Not available





## Small to medium commercial – Commercial Series

## Outdoor

Material description		Standard TriTech	Anti-mask TriTech	Outdoor TriTech
Commercial type number (CTN)		ISC-CDL1-W15x	ISC-CDL1-WA15x	OD850
				
Overview	Application risk level	Moderate risk	High risk	Moderate risk
	Environment*	Difficult	Difficult	Outdoor
Specifications	Coverage/range	15 x 15 m	15 x 15 m	15 x 15 m
	Mounting height	2.2 to 2.75 m	2.2 to 2.75 m	2.1 to 2.7m
	Operating temperature**	-30° to 55° C	-30° to 55° C	-35° to 54° C
	Operating voltage	9 to 15 VDC	9 to 15 VDC	10 to 15 VDC
	Current draw (typical)	10 mA	15 mA	62 mA
Features	First step processing	■	■	–
	Microwave noise adaptive processing	■	■	–
	Motion Analyzer II PIR signal processing	–	–	■
	Linear travel distance (LTD) microwave signal processing	–	–	■
	Active white light suppression	■	■	–
	Dynamic temperature compensation	■	■	–
	Look-down zone	■	■	■
	Pet/small animal immunity	4.5 kg	4.5 kg	–
	Alarm output	NC	NC	–
	Alarm memory	■	■	–
	Anti-mask	–	■	–
	Tamper	Cover	Cover + wall	Cover
	Sealed optical chamber	■	■	■
	Cloak and Camouflage Detection Technology (C <sup>2</sup> DT)	HI/LO	HI/LO	–
Ease of Installation***	No-adjust installation	■	■	Flexible mounting height
	Enable/disable look-down	■	■	■
	Enable/disable LED	■	■	■
	Microwave Doppler range adjustment	■	■	■
	Sensitivity adjustment	–	–	■
Certifications		AFNOR, CCC, CE, EN50131-2-4 Grade 2, FCC, IC, UL	AFNOR, CCC, CE, EN50131-2-4 Grade 3, FCC, IC, UL	CCC, FCC, IC, UL




■ Available – Not available

## Ceiling Mount

Material description		Low-profile PIR	High-performance PIR	High-performance PIR	High-performance TriTech
Commercial type number (CTN)		DS936	DS938Z	DS939	DS9370x/DS9371x
					
Overview	Application risk level	Low to moderate risk	Low to moderate risk	Moderate risk	Moderate risk
	Environment*	Standard	Standard	Standard	Difficult
Specifications	Optics	Fresnel	Mirror optics	Triple 35-zone Fresnel	Triple 35-zone Fresnel
	Coverage/range	7 m diameter	18 m and 360°	14 m diameter	14 m diameter
	Mounting height	2 to 3.6m	2.5 to 6 m	2.4 to 5.2 m	2.4 to 5.2 m
	Operating temperature**	-29° to 49° C	-29° to 49° C	-29° to 49° C	-10° to 55°C(CE); 5° to 40°C(FR,UK)
	Operating voltage	10 to 15 VDC	6.0 to 15.0 VDC	9 to 15 VDC	9 to 15 VDC
Features	Current draw (typical)	20 mA	18 mA	12 mA	19 mA
	First Step Processing	–	–	■	■
	Dynamic temperature compensation	–	–	■	■
	Pattern masking	■	■	■	■
	Alarm output	NC	NC/NO	NC/NO	NC/NO
	Alarm memory	–	–	■	■
	Tamper	Cover	Cover	Cover + wall	Cover + wall
	Sealed optical chamber (insect/dust)	■	–	■	■
	Switchable coverage patterns	–	■	■	■
Ease of Installation***	Enable/disable LED	■	■	■	■
	PIR sensitivity adjustment	■	■	■	■
	Flexible mounting height	■	■	■	■
	Remote walk test	–	–	■	■
Certifications		CCC, CE, UL	AFNOR, CCC, CE, EN50131-2-2 Grade 2, UL	AFNOR, CCC, CE, EN50131-2-2 Grade 2, INCERT, UL	CCC, FCC, IC, UL

■ Available – Not available






## Specialty – Seismic/Shock

Material description		Standard Seismic	High-performance Seismic	Shock
Commercial type number (CTN)		ISN-SM-50	ISN-SM-80	ISC-SK10
				
Overview	Type	Thermal, Mechanical, Explosive, Water Attack Detection	Thermal, Mechanical, Explosive, Water Attack Detection	Mechanical Attack Detection
	Application type	Small to large commercial	Small to large commercial	Residential to large commercial
	Application risk level	High risk	High risk	High risk
	Environment	Vault walls and doors, safes, ATMs, strong rooms, vending machines	Vault walls and doors, safes, ATMs, strong rooms, vending machines	Vault walls and doors, safes, ATMs, strong rooms, vending machines
Specifications	Coverage/range	50 m <sup>2</sup>	80 m <sup>2</sup>	1.5 to 3.5 m radius
	Operating temperature**	-40° to 70° C	-40° to 70° C	-10° to 55° C
	Operating voltage	8 to 16 VDC	8 to 16 VDC	9 to 15 VDC
	Current draw (typical)	3 mA	3 mA	8.5 mA
	Environmental rating	IP43	IP43	IP43
Features	Anti-drilling shield	■	■	–
	Temperature supervision	■	■	–
	Voltage monitoring	■	■	–
	Automatic self test	■	■	–
	Local event memory	–	■	–
	Alarm output	NC solid state relays	NC solid state relays	NC solid state relays
	LED	–	–	Green, red
	Tamper	Cover + wall	Cover + wall	Cover
	Intelligent installation mode	–	–	■
Ease of installation	Mounting and function test	■	■	■
	Sensitivity adjustment	■	■	■
	Mounting location	Steel, concrete	Steel, concrete	Any
	Installation accessories	Anti-drill foil (ISN-GMX-D7), Floor socket (ISN-GMX-B0), Mounting plate (ISN-GMX-P0), Swivel plate (ISN-GMX-P3S), Test transmitter (ISN-GMX-S1), Wall mounting kit (ISN-GMX-W0)	Anti-drill foil (ISN-GMX-D7), Floor socket (ISN-GMX-B0), Mounting plate (ISN-GMX-P0), Test transmitter (ISN-GMX-S1), Wall mounting kit (ISN-GMX-W0)	–
	Software options	ISN-SMS-W7 SensTool PC Software	ISN-SMS-W7 SensTool PC Software	–
	Approvals/listings	CCC, CE, NCP, VdS, UL	CCC, CE, NCP, VdS, UL	CCC, CE

■ Available – Not available



## Specialty – Glass Break

Material description		Standard	Standard	Standard	Standard	Combo Magnetic Contact
Commercial type number (CTN)		DS1101i	DS1108i	DS1102i	DS1103i	DS1109i
						
Overview	Application type	Residential to large commercial	Residential to large commercial	Residential to large commercial	Residential to large commercial	Residential to large commercial
	Application risk level	Low to moderate risk	Low to moderate risk	Low to moderate risk	Low to moderate risk	Low to moderate risk
	Environment	Standard	Standard	Standard	Standard	Standard
Specifications	Coverage/range	7.6 m diameter	7.6 m diameter	7.6 m diameter	7.6 m diameter	3 m diameter
	Operating temperature**	-29° to 49° C	-29° to 49° C	-29° to 49° C	-29° to 49° C	-29° to 49° C
	Operating voltage	6 to 15 VDC	9 to 15 VDC	6 to 15 VDC	9 to 15 VDC	6 to 15 VDC
	Current draw (typical)	23 mA	21 mA	23 mA	21 mA	21 mA
Features	Sound Analysis Technology (SAT) processing	NC/NO	NC	NC/NO	NC	NC
	Alarm output	■	■	■	■	■
	Tamper	■	■	■	–	■
Ease of installation	Mounting location	Wall, ceiling	Wall, ceiling	Wall, ceiling	Wall, ceiling (flush)	Door, window frame
	Installation accessories	Glass Break Tester (DS1110i)	Glass Break Tester (DS1110i)	Glass Break Tester (DS1110i)	Glass Break Tester (DS1110i)	Glass Break Tester (DS1110i)
Certifications		CCC, CE, UL	CCC, CE, UL	CCC, CE, UL	CCC, CE, UL	CCC, CE, UL



■ Available – Not available

## Specialty – Request-to-Exit

Material description		Standard PIR		High-performance PIR	
Commercial type number (CTN)		DS150i	DS151i	DS160	DS161
					
Specifications	Coverage/range	2.4 x 3 m	2.4 x 3 m	2.4 x 3 m	2.4 x 3 m
	Mounting height	2.1 to 3 m	2.1 to 3 m	2.3 to 4.6 m	2.3 to 4.6 m
	Operating temperature**	-29° to 49° C	-29° to 49° C	-29° to 49° C	-29° to 49° C
	Operating voltage	12 VAC or VDC; 24 VAC or VDC	12 VAC or VDC; 24 VAC or VDC	12 VAC or VDC; 30 VAC or VDC	12 VAC or VDC; 30 VAC or VDC
	Current draw (typical)	26 mA nominal	26 mA nominal	8 mA nominal	8 mA nominal
Features	Door monitor with sounder	–	–	■	■
	Keycard reader input	–	–	■	■
	Sequential logic input	–	–	■	■
	Relay fail-safe/fail-secure	■	■	■	■
	Relay settable select	■	■	■	■
	Relay latch time adjustment	0.25 to 60 seconds	0.25 to 60 seconds	0.5 to 64 seconds	0.5 to 64 seconds
	Pattern masking	■	■	■	■
	Alarm output/memory	–/■	–/■	–/■	–/■
	Tamper	–	–	■	■
	Pointable optics	Vertical adjustment	Vertical adjustment	Vertical adjustment	Vertical adjustment
	Switchable relay mode	■	■	■	■
	Switchable timer reset mode	■	■	■	■
	Adjustable sounder volume	–	–	■	■
	PIR sensitivity adjustment	■	■	■	■
	Enable/disable LED	–	–	■	■
	Flexible mounting height	■	■	■	■
Certifications		UL, CE	UL, CE	UL, CE	UL, CE




■ Available – Not available

## Wireless – RADION<sup>†</sup>

Material description		Standard PIR	Curtain PIR
Commercial type number (CTN)		RFPR-12	RFPR-C12
			
Overview	Application risk level	Low to moderate risk	Low to moderate risk
	Environment*	Standard	Standard
Specifications	Frequency	433.42 MHz	433.42 MHz
	Coverage/range	12 x 12 m	12 x 1.5 m
	Mounting height	2.1 to 2.75 m	2.1 to 2.6 m
	Operating temperature**	-10° to 49° C	-10° to 49° C
	Operating voltage	3 VDC	3 VDC
	Power source	One CR123A Lithium battery	One CR123A Lithium battery
	Battery life	Up to 5 years	Up to 5 years
Features	Motion Analyzer II signal processing	■	■
	Dynamic temperature compensation	■	■
	Wall-to-wall coverage	■	■
	Look-down zone	■	■
	Pet/small animal immunity	13 kg	13 kg
	Tamper	Cover + wall	Cover + wall
	Sealed optical chamber	■	■
Ease of installation***	No adjust installation	■	■
	Enable/disable look-down	■	■
Certifications		ANATEL, AFNOR, CCC, CE, EN50131-2-2 Grade 2, FCC, IC, INCERT, RCM, UL	ANATEL, AFNOR, CCC, CE, EN50131-2-2 Grade 2, FCC, IC, INCERT, RCM, UL

■ Available – Not available

## Wireless – RADION<sup>†</sup>

Material description		Surface Mount Contact	Recessed Mount Contact	Universal Transmitter	Smoke Detector
Commercial type number (CTN)		RFDW-SM	RFDW-RM	RFUN	RFSM
					
Specifications	Frequency	433.42 MHz	433.42 MHz	433.42 MHz	433.42 MHz
	Coverage/range	–	–	–	57.2° +/- 2.8° C
	Reed switch gap width	< 19 mm	< 19 mm	< 19 mm	–
	Operating temperature*	-10° to 49° C	-10° to 49° C	-10° to 49° C	-10° to 49° C
	Operating voltage	1.5 VDC	1.5 VDC	1.5 VDC	3 VDC
	Power source	One AAA Lithium battery	One AAA Lithium battery	One CR123A Lithium battery	Two CR123A Lithium battery
	Battery life	Up to 5 years	Up to 5 years	Up to 5 years	Up to 5 years
Features	Tamper	■	■	■	■
	LED indicator	–	–	–	■
Certifications		ANATEL, CCC, CE, EN50131, FCC, IC, INCERT, RCM, UL	ANATEL, CCC, CE, EN50131, FCC, IC, INCERT, RCM, UL	ANATEL, CCC, CE, EN50131, FCC, IC, INCERT, RCM, UL	ANATEL, CE, CSFM, FCC, IC, RCM, UL

■ Available – Not available



## Wireless – RADION<sup>†</sup>

Material description		Glass Break	Bill Trap	Keyfob	Panic Button
Commercial type number (CTN)		RFGB	RFBT	RFKF-FBS, RFKF-TBS	RFPB-SB, RFPB-TB
					
Specifications	Frequency	433.42 MHz	433.42 MHz	433.42 MHz	433.42 MHz
	Coverage/range	6 m diameter	–	–	–
	Operating temperature**	-10° to 49° C	-10° to 49° C	-10° to 49° C	-10° to 49° C
	Operating voltage	3 VDC	1.5 VDC	3 VDC	3 VDC
	Power source	One CR123A Lithium battery	One AAA Lithium battery	One CR2032 Lithium battery	One CR2032 Lithium battery
	Battery life	Up to 5 years	Up to 5 years	Up to 5 years	Up to 5 years
Features	Tamper	■	■	–	–
	LED indicator	■	■	■	■
	Synchronized encryption	–	–	■ (FBS, TBS models)	–
Certifications		ANATEL, CCC, CE, EN50131, FCC, IC, INCERT, RCM, UL	ANATEL, CCC, CE, EN50131, FCC, IC, INCERT, RCM, UL	ANATEL, CCC, CE, EN50131, FCC, IC, INCERT, RCM, UL	ANATEL, CE, CSFM, FCC, IC, RCM, UL

■ Available – Not available

## Technical notes

\* Difficult environments include rooms with potential false alarm sources, such as: air conditioning vents, strong drafts of cold or warm air, slow moving objects such as curtains, plants, or signs hanging from the ceiling, a fan that could be running when the system is activated, under floor heating, room temperatures exceeding 30° C, a detector that could be exposed to bright white light (car headlights, floodlights, direct sunlight, etc.)

\*\* For UL installations the operating range is 0° to 49° C, indoor use.

\*\*\* Commercial Series, Blue Line Gen2 Series and RADION models feature a two-piece design, self-locking enclosure, interchangeable mounting base, integrated bubble level, and removable lift-gate terminal strips.

† Wireless peripherals require a compatible receiver.  
B810 RADION receiver is compatible with SDI2 bus panels (B Series and G Series); RFRC–OPT is compatible with Option bus panels; RFRC–STR is compatible with Streamline bus panels.

Please note: Devices listed are not available in every region. Please check with your local sales representative for availability.



## Bosch Security and Safety Systems

Protecting lives, buildings and assets is our aim. Our product portfolio includes video security, intrusion detection, fire detection and voice evacuation systems as well as access control and management systems. Professional audio and conference systems for communications of voice, sound and music complete the range. Visit **[boschsecurity.com](https://www.boschsecurity.com)** for more information.

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