

## Intrusion Detector Reference Guide





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## Security you can rely on

Whether you are securing a home, retail store, bank, museum, commercial business or government facility, you need dependability from your systems. With decades of experience and an unwavering dedication to high-quality and high-performing products, Bosch detectors provide best-in-class false alarm immunity and catch performance while minimizing installation time and complexity. Millions of residential and commercial users rely on Bosch for superior intrusion detection.



Bosch is recognized throughout the security industry as a global leader in intrusion detection expertise. We have earned this reputation by consistently providing products that meet your needs with a focus on performance, reliability, durability, and ease of installation.

Bosch detectors fulfill the requirements of standards all

over the world. In the state-of-the-art Bosch laboratory, we verify that our detectors pass the most stringent requirements of each certification standard. Bosch also designs its own, even more demanding, tests to ensure the detectors are virtually immune to environmental disturbances. As a result, false alarm protection and catch performance exceed the requirements of any single country. With Bosch detectors, there is no hiding place for intruders and zero tolerance for false alarms.

## Wall-to-Wall coverage

#### **Excellent catch performance**

First Step Processing intelligently analyzes motion for an almost instant response to intruders. The detectors automatically adjust to their environment by compensating for temperature fluctuations, so you are guaranteed optimal performance regardless of changes in room conditions.

For more challenging applications, models with Sensor Data Fusion technology employ a sophisticated software algorithm to analyze signals from multiple sensors, including microwave, temperature, and white light levels, to make the most intelligent alarm decisions in the security industry.



#### No more false alarms

Bosch detectors feature Microwave Noise Adaptive Processing to easily differentiate humans from false alarm sources, such as a ceiling fan or hanging sign. For increased reliability, dual sensors process the PIR and microwave Doppler radar signals independently and must agree there is an alarm before the relay activates. The sealed optical chamber also prevents drafts and insects from affecting the detector. Bosch pet and small animal immunity provides optimal sensitivity for any application.

#### Minimize time on the ladder

Bosch detectors include a number of unique design features to help you get the job done faster and more reliably.

- A self-locking, two-piece enclosure means no more lost screws and an easy snap-to-lock installation
- Integrated biaxial bubble level eliminates the guesswork to ensure proper alignment, requiring one less installation tool
- The removable, gap-free, liftgate-style terminal strip reduces mounting time to mere seconds and prevents incorrect wiring to eliminate future service calls
- Optics and electronics are assembled into the front enclosure and sealed with a protective cover to prevent damage during installation
- A flexible mounting height makes positioning the detector easy, and you get no-gap coverage without any optical or electronic on-site adjustments

### **Selectable Pet Immunity**

Only Bosch exclusive technology allows the installer to turn pet immunity on or off to suit the application requirements.

Use the same model for multiple applications to reduce your inventory – just select Pet or No Pet! Selecting Pet minimizes nuisance false alarms from animals up to 100 lbs. (40 kg.), so you only handle valid alarms.



## Ideal for any application

Intelligent intrusion detection is a delicate balance between responding to real security breaches and ignoring sources of costly false alarms. Bosch offers a choice of detector models that set the standard for reliability and rapid detection.

Our intrusion detectors suit the requirements of virtually any application – from residential to large commercial to high security. They stand up to multiple challenges, including strong drafts, moving objects, and the presence of pets.

#### Our complete line includes:

- Passive Infrared (PIR) and TriTech<sup>®</sup>
  - (Combination PIR and microwave Dopper radar)
  - Long-range
  - 360° ceiling mount
  - Pet friendly®

- ► Request-to-exit PIR
- Glass break
- Seismic and shock
- Photoelectric beam
- Wireless communication



		PIR			
Plue Line (	Cond Foring	Standard	Pet Friendly®	Quad PIR	
Detection is	s Power				
Description		ISC-BPR2-W12	ISC-BPR2-WP12	ISC-BPQ2-W12	
Overview	Application type		Residential to Small Comme	rcial	
	Application risk level	Low	to moderate risk	Moderate risk	
	Environment *		Standard	Difficult	
Specifications	Coverage/range		40 x 40 ft (12 x 12 m)		
	Mounting height		7 to 9 ft (2.3 to 2.75 m)		
	Operating temperature **	-20° to 130°F (-30° to 55°C)			
Ор	Operating voltage		9 to 15 VDC		
	Current draw (typical)		10 mA		
eatures	First Step Processing			•	
reatures	Sensor Data Fusion	_	-	_	
	Microwave poise adaptive processing	_	_	_	
	Range adaptive radar	_		_	
	Active white light suppression	_	_	_	
	Dynamic temperature compensation			-	
	Tri focus optios	•	•	•	
		_			
	Dot (cmall animal immunity	■ 10 lb (4 5 kg)	45 lb (20 kg)		
		10 ID (4.5 Kg)	43 ID (20 Kg)	10 lb (4.5 kg)	
	Pattern masking	-			
	Alarm memory	_	=	_	
	Alarm output		NC		
	LED indicator		Blue		
	Anti-mask	-		_	
	lamper		Cover		
	Insect/dust immunity				
ase of	Two-piece design	•	•		
nstallation	Self-locking enclosure	•	•		
	Interchangeable mounting base	•	•		
	Bubble level	•	•		
	Removable lift-gate terminal strips	•	•		
	Enable/disable LED			•	
	Enable/disable pet immunity	-		_	
	Enable/disable look-down		•		
	Switchable detection patterns	-	_	_	
	PIR sensitivity adjustment		Automatic		
	Microwave Doppler range adjustment	_	_	_	
	Flexible mounting height				
	Mounting location	_	Surface, corner	_	
	Installation accessories	B328 Gim	hal-mount B335 Swivel-mount E	222 Coiling-mount	

AFNOR, CCC, CE, EN50131-2-2 Grade 2, INCERT, UL Approvals/listings

\* 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 86°F (30°C), a detector that could be exposed to bright white light (car headlights, floodlights, direct sunlight, etc.)

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\*\* For UL installations the operating range is 32°F to 120°F (0°C to 49°C), indoor use

Remote walk test

Remote self test

Certification

TriTech® (PIR + MW)				
Standard	Pet Friendly®			
ISC-BDL2-W12x	ISC-BDL2-WP12x	ISC-BDL2-WP6x		
F	Residential to Small Commercial			

Description		ISC-BDL2-W <u>12x</u>	ISC-BDL2-WP12x	ISC-BDL2-WP6x	
Overview	Application type	Residential to Small Commercial			
	Application risk level		Low to moderate risk		
	Environment *	Difficult			
Specifications	Coverage/range	40 x 40 ft (12 x 12 m) 20 x 20 ft (6 x 6 m)			
	Mounting height		7 to 9 ft (2.3 to 2.75 m)		
	Operating temperature **		-20° to 130°F (-30° to 55°C)		
	Operating voltage	9 to 15 VDC			
	Current draw (typical)	10 mA			
Features	First Step Processing		•	•	
	Sensor Data Fusion	_	_	_	
	Microwave noise adaptive processing		•		
	Range adaptive radar	_	_	_	
	Active white light suppression	_	_	_	
	Dynamic temperature compensation		•		
	Wall-to-wall coverage	•		•	
	Tri-focus optics	_	_	_	
	Look-down zone	•	•	•	
	Pet/small animal immunity	10 lb (4.5 kg)	100 lb (	(45 kg)	
	Pattern masking	_	_	_	
	Alarm memory	_	_	_	
	Alarm output	NC			
	LED indicator	Blue			
	Anti-mask				
	Tamper		Cover		
	Insect/dust immunity				
Ease of	Two-piece design			•	
installation	Self-locking enclosure		•		
	Interchangeable mounting base			•	
	Bubble level		•		
	Removable lift-gate terminal strips		•	•	
	Enable/disable LED				
	Enable/disable pet immunity	_			
	Enable/disable look-down	_	_	_	
	Switchable detection patterns	_	_	_	
	PIR sensitivity adjustment		Automatic		
	Microwave Doppler range adjustment				
	Flexible mounting height				
	Mounting location		Surface, corner		
	Installation accessories	B328 Gimbal-	mount, B335 Swivel-mount, B33	38 Ceiling-mount	
	Remote walk test				
	Remote self test	_	_	_	
Certification	Approvals/listings	AFNOR, CCC, CE, EN50131-2-4 Grade 2, FCC, IC, INCERT, UL			

#### **Commercial Series**

Detection delivered. Reliability assured.

Description		ISC-CDL1-W15x	ISC-CDL1-WA15x	ISC-CDL1-WA12x
Overview	Application type		Small to Medium Commercia	
	Application risk level	Moderate risk	High	risk
	Environment *		Difficult	
Specifications	Coverage/range	50 x 50 ft (15 x 15 m) 40 x 40 ft (12 x 12m)		
	Mounting height		7.5 to 9 ft (2.3 to 2.75 m)	
	Operating temperature **		-22° to 130°F (-30° to 55°C)	
	Operating voltage		9 to 15 VDC	
	Current draw (typical)	10 mA	15n	nA
Features	First Step Processing			
	Sensor Data Fusion	_	_	_
	Motion monitor	_	_	_
	Microwave noise adaptive			
	processing		•	•
	Range adaptive radar	_	_	_
	Active white light suppression			
	Dynamic temperature			
	compensation		•	•
	Wall-to-wall coverage			
	Tri-focus optics	_	_	_
	Look-down zone			
	Pet/small animal immunity		10 lb (4.5 kg)	
	Alarm memory	_	_	_
	Alarm output		NC	
	PIR supervision			
	Microwave supervision			
	I FD indicator	_	Blue	
	Anti-mask	- 1		
	Tamper	Cover	Cover + wall	Cover + wall
	Insect/dust immunity	•		
Fase of				
installation	Self-locking enclosure			
motunation	Interchangeable mounting base			
	Bubble level	-		
	Removable lift-gate terminal strips	-		-
	Selectable PIB sensitivity	High (EN Grade 2) Low	High (EN Grade 3)	Low (EN Grade 2)
	Pointable ontics			
	Interchangeable ontics		_	_
			-	
	Enable/disable look-down	-		•
	Switchable detection patterns			
	PIR sensitivity adjustment		Ves	
	Microwaye Doppler range adjustment			
	Elevible mounting height	-		
	Mounting location	•	Surface corper	•
		P228 Cimbal-m	Surface, corrier	9 Coiling-mount
	Remote walk test			
	Pomoto solf tost		—	_
Cortification	Approvals/listings		_	-
Certification	Αρριοναις/πετιτιχε	AFNOR, CCC, CE, EN50131-2-4 Grade 2		50131-2-1 Grada 2
		FCC IC INCEPT III	FOC IC INCE	ST III VdS
		VdS	1 00, 10, INCE	, 02, 400

TriTech (PIR + MW)

Anti-mask

Standard

\* 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 86°F (30°C), a detector that could be exposed to bright white light (car headlights, floodlights, direct sunlight, etc.)



		DID		TriTach® (DID + MW)	
		Standard	Anti-mask	Standard	
Intelligent Mo	al Series otion Detection				
Description		ISC-PPR1-W16	ISC-PPR1-WA16x	ISC-PDL1-W18x	
Overview	Application type		Small to Large Commercial		
	Application risk level	Moderate risk	High risk	Moderate risk	
	Environment *	Sta	ndard	Difficult	
Specifications	Coverage/range	50 x 70 ft 25 x 33 f	(16 x 21 m) t (8 x 10 m)	60 x 80 ft (18 x 25 m) 25 x 33 ft (8 x 10 m)	
	Mounting height		7 to 10 ft (2.1 to 3.0 m)		
	Operating temperature **	−20° to 130°F (−29° to 55°C)	−22° to 130°F (−30° to 55°C)	–20° to 130°F (–29° to 55°C)	
	Operating voltage		9 to 15 VDC		
	Current draw (typical)	10 mA	18 mA	13 mA	
Features	First Step Processing	-	-	-	
	Sensor Data Fusion		•	•	
	Microwave noise adaptive processing	-	_	•	
	Range adaptive radar	_	_	•	
	Active white light suppression		•	•	
	Dynamic temperature compensation	•	•	•	
	Wall-to-wall coverage	-	_	-	
	Tri-focus optics	•	8	•	
	Look-down zone				
	Pet/small animal immunity		10 lb (4.5 kg)		
	Alarm memory				
	Alarm output	NC			
	LED indicator	E	Blue	Blue, yellow, red	
	Anti-mask	-		∎ (MW only)	
	Tamper		Cover + wall		
	Insect/dust immunity		•	•	
Ease of	Iwo-piece design		•	I	
Installation	Self-locking enclosure				
	Interchangeable mounting base				
	Bubble level				
	terminal strips	•	•	•	
	Enable/disable LED	-		-	
	Enable/disable pet immunity	—	-	-	
	Enable/disable look-down				
	Switchable coverage patterns		•		
	PIR sensitivity adjustment	_	_	_	
	Microwave Doppier range adjustment	_			
			Surrace, corner	20 Cailing mount	
		B328 GIMbal-mo	ount, B335 Swivel-mount, B3	sso Celling-mount	
	Remote Walk test				
Cartification					
Certification	Approvais/listings	EN50131-2-2 Grade 2,	AFNOR, CE, EN50131-2-2 Grade 3,	EN50131-2-4 Grade 2,	

\* 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 86°F (30°C), a detector that could be exposed to bright white light (car headlights, floodlights, direct sunlight, etc.)

FCC, IC, INCERT, UL

FCC, IC, INCERT, UL

FCC, IC, INCERT, UL

TriTech <sup>®</sup> (PIR + MW)		
Anti-mask	Curtain	Anti-mask Curtain
ISC-PDL1-WA18x	ISC-PDL1-WC30x	ISC-PDL1-WAC30

Description		ISC-PDL1-WA18X	ISC-PDL1-WC30x	ISC-PDLI-WAC30X		
Overview	Application type	Small to Large Commercial				
	Application risk level	High risk	Moderate risk	High risk		
	Environment *	Difficult				
Specifications	Coverage/range	60 x 80 ft (18 x 25 m) 100 x 8.5 ft (30 x 2.6 m)				
		25 x 33 ft (8 x 10 m)	25 x 3.3 ft	(8 x 1 m)		
	Mounting height		7 to 10 ft (2.1 to 3.0 m)			
	Operating temperature **	-22° to 130°F (-30° to 55°C)				
	Operating voltage		9 to 15 VDC			
	Current draw (typical)		18 mA			
Features	First Step Processing	_	_	_		
	Sensor Data Fusion	•		•		
	Microwave noise adaptive	-	_			
	processing	-	-	-		
	Range adaptive radar	•	•	•		
	Active white light suppression	•		•		
	Dynamic temperature		-			
	compensation	-	-	-		
	Wall-to-wall coverage	_	_			
	Tri-focus optics	•		•		
	Look-down zone	1		•		
	Pet/small animal immunity		10 lb (4.5 kg)			
	Alarm memory	1		•		
	Alarm output	NC				
	LED indicator	Blue, yellow, red				
	Anti-mask					
	Tamper	Cover + wall				
	Insect/dust immunity					
Ease of	Two-piece design		•			
installation	Self-locking enclosure	•	•			
	Interchangeable mounting base	•	•	•		
	Bubble level					
	Removable lift-gate					
	terminal strips					
	Enable/disable LED	_	_	_		
	Enable/disable pet immunity					
	Enable/disable look-down	-		-		
	Switchable coverage patients			•		
	Microwaya Doppler range adjustment	-	-	-		
	Flovible mounting height		•			
	Mounting location		Surface corpor			
	Installation accessories	D220 Cimbol ma	unt P225 Swivel mount P22	29 Coiling-mount		
	Pomoto walk tost					
	Remote solf test	•				
Cortification						
Certification	Αρριοναις/πετιτιχε	AFNOR, COU, CE, FN50131-2-4 Grade 2	AFINUK, UE, FN50131-2-4 Grade 2	AFNOR, CE,		
		FCC, IC, INCERT, UI	FCC, IC, INCERT, UI	EN50131-2-4-Grade 3		
		, . ,	, . ,			

#### **Classic Line**

Long Range

#### PIR Long-range



Description		D\$778	DS794Z		
Overview	Application type	l arge Com	mercial		
0.01.000	Application risk level	Moderate risk			
	Environment *	Standa	rd		
Specifications	Coverage/range	200 x 15 ft (61 x 4.5 m)	200 x 10 ft (61 x 3 m) 80 x 50 ft (24 x 16 m)		
	Mounting height	6.5 to 8.5 ft (2 to 2.6 m)	7.5 to 15 ft (2.3 to 5 m)		
	Operating temperature **	-40° to 122°F (-4	40° to 50°C)		
	Operating voltage	6 to 15 \	/DC		
	Current draw (typical)	_	_		
	Current draw (maximum)	18 m/	4		
Features	First Step Processing	_	_		
	Sensor Data Fusion	_	_		
	Microwave noise adaptive processing	_	_		
	Range adaptive radar	_	_		
	Motion Analyzer II signal processing				
	Motion monitor	_			
	Active white light suppression	_	_		
	Dynamic temperature compensation	_	_		
	Wall-to-wall coverage	_	_		
	Tri-focus optics	_	_		
	Look-down zone		_		
	Pet/small animal immunity	_	_		
	Pattern masking	_	_		
	Alarm memory	_	_		
	Alarm output	NC/NO			
	PIR supervision	_			
	Microwave supervision	_	_		
	LED indicator	Red			
	Anti-mask				
	Tamper	Cover			
	Insect/dust immunity		_		
Ease of	Two-piece design	_	_		
installation	Self-locking enclosure	_	_		
	Hinged mounting base	_	_		
	Pointable optics	Horizontal ±10° Vertical ±2° to –18°	_		
	Interchangeable optics				
	Switchable coverage patterns				
	Enable/disable Day/Night mode	-	_		
	Enable/disable LED	_			
	Enable/disable look-down		_		
	Selectable AND/OR gate	_	_		
	PIR sensitivity adjustment				
	Microwave Doppler range adjustment	_	-		
	Adjustable timed relay output	_	_		
	Flexible mounting height				
	Mounting location	Wall, corner	Surface, corner		
	Installation accessories	B328 Gimbal-mount, B334 Swivel-mount B338 Ceiling-mount	B334 Swivel Mount included, OA120–2 Mirror		
	Remote walk test	_	_		
	Remote self test	-	_		
Certification	Approvals/listings	UL. CE			

\* 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 86°F (30°C), a detector that could be exposed to bright white light (car headlights, floodlights, direct sunlight, etc.)

	TriTech® (PIR + MW)		
	Long-range	Outdoor	
	- 1		
	DS720i	OD850	
Application type	Medium to Large Commercial	Residential to Large Commercial	
Application risk level	Moderate to high risk	Moderate risk	
Environment *	Diff	icult	
Coverage/range	300 x 15 ft (91 x 4.5 m) 90 x 70 ft (27 x 21 m)	50 x 50 ft (15 x 15 m)	
Mounting height	7.5 to 10 ft (2.3 to 3 m)	7 to 9 ft (2.1 to 2.7 m)	
Operating temperature **	-22° to 120°F (-30° to 50°C)	-20° to 130°F (-30° to 55°C)	
Operating voltage	9 to 15 VDC	10 to 15 VDC	
Current draw (typical)	32 mA	22 mA	
Current draw (maximum)	60 mA	62 mA	
First Step Processing	_	_	
Sensor Data Fusion	_	_	
Microwave noise adaptive processing		_	
Range adaptive radar	_	_	
Motion Analyzer II signal processing			
Motion monitor		_	
Active white light suppression	_	_	
Dynamic temperature compensation			
Wall-to-wall coverage	_	_	
Tri-focus optics	_	_	
Look-down zone	_		
Pet/small animal immunity	_		
Pattern masking	_	_	

Description

Specifications

Overview

Features

kative white light suppression -   Active white light suppression -   Dynamic temperature compensation -   Wall-to-wall coverage -   Thr/focus optics -   Lookdown zone -   Pettsrmal animal immunity -   Patter masking -   Alarm output NC/NO   Patter masking -   Alarm output NC/NO   PR supervision -   Itcrowave supervision -   Red, green, yellow Red, green   Anti-mask -   Tinsect/dust immunity -   Insect/dust immunity -   Insect/dust immunity -   Hinged mouting base -   Stef-locking enclosure -   Hinged mouting base -   Pointable optics -   Interchangeable optics -   Enable/disable lock-down -   Enable/disable lock-down -   Enable/disable lock-down -   Enable/disable lock-down		Motion Analyzer II signal processing		
Active white light suppression - -   Dynamic temperature compensation i i   Wall-to-wall coverage - -   Tri-focus optics - -   Look-down zone - -   Pet/small animal immunity - -   Pattern masking - -   Alarm memory 1 -   Alarm memory 0 -   Alarm output NC/NO 2x NC/NO   PR supervision 1 -   ILED indicator Red. green, yellow Red. green   Atimask 1 -   Tamper Cover + wall Cover   Insect/dust immunity - -   Tamper Cover + wall Cover   Insect/dust immunity - -   Insect/dust immunity - - -   Insect/dust immunity - 1 -   Insect/dust immunity - - -   Insect/dust immunity - 1		Motion monitor		_
Pynamic temperature compensation Image: Compensation   Wall-to-wall coverage -   Tri-focus optics -   Look-down zone -   Pet/small animal immunity -   Pet/small animal immunity -   Pet/small animal immunity -   Pattern masking -   Alarm output NC/NO   Alarm output NC/NO   PIR supervision 1   LED indicator Red, green, yellow   Anti-mask 1   Tamper Cover + wall   Insect/dust immunity -   Insect/dust immunity -   Ease of Self-locking enclosure   Insect/dust immunity -   Ease of Self-locking enclosure   Hinged mounting base -   Interchangeable optics 1   Interchangeable optics 1   Interchangeable optics 1   Enable/disable LOD 1   Enable/disable LOD -   Enable/disable LOD -   Enable/disable LO		Active white light suppression	_	_
will-to-wall coverage - -   Tri-focus optics - -   Tri-focus optics - -   Pattern masking - -   Pattern masking - -   Alarm memory 0 -   Alarm memory 0 -   Alarm output NC/NO 2x NC/NO   PiR supervision 0 -   Microwave supervision 0 -   Anti-mask 0 -   Tamper Cover + wall Cover   Tamper Cover + wall Cover   Self-locking enclosure - -   Pointable optics 0 -   Interchangeable optics 0 0   Suitchable coverage patterns 1 0   Selectable AND/OR gate - 0   Flackisable lock/down - 0   Selectable AND/OR gate - 0   Pirotable optics - 0   Selectable AND/OR gate - 0 </td <td colspan="2">Dynamic temperature compensation</td> <td></td> <td></td>	Dynamic temperature compensation			
Frifocus optics - -   Lookdown zone - 0   Pet/small animal immunity - -   Pattern masking - -   Alarm memory 0 -   Alarm output NC/NO 2x NC/NO   PIR supervision 0 -   LED indicator Red, green, yellow Red, green   Anti-mask 0 -   Tamper Cover + wall Cover   Insect/dust immunity - -   Ease of Two-piece design -   Insect/dust immunity - -   Flinged mounting base - -   Pointable optics - -   Hinged mounting base - -   Pointable optics - -   Self-locking enclosure - -   Enable/disable Day/Night mode - -   Enable/disable look-down - -   Enable/disable look-down - -   Flexible mounting height <td></td> <td>Wall-to-wall coverage</td> <td>_</td> <td>_</td>		Wall-to-wall coverage	_	_
Lookdown zone - Image: Control of the second secon		Tri-focus optics	_	_
Pet/small animal immunity - -   Pattern masking - -   Alarm memory 0 0   Alarm output NC/NO 2x NC/NO   Pill supervision 0 0   Microwave supervision 0 0   LED indicator Red, green, yellow Red, green   Antimask 0 -   Tamper Cover + wall Cover   Tamper Cover + wall Cover   Tamper 0 -   Fase of instel/dust immunity - -   Fase of instel/dust immunity - -   Tamper Cover + wall Cover   Tamper 0 -   Vorpiece design - -   Pointable optics - -   Interchangeable optics - -   Switchable coverage patterns - -   Enable/disable look-down - -   Selectable AND/OR gate - -   Microwave Doppler range adjustm		Look-down zone	_	•
Pattern masking – –   Alarm memory 1 –   Alarm output NC/NO 2x NC/NO   PIR supervision 1 –   Microwave supervision 1 –   LED indicator Red, green, yellow Red, green   Anti-mask 1 –   Tamper Cover + wall Cover   Insect/dust immunity – 1   Face of installation Two-gree design –   File of coking enclosure – –   Pointable optics – –   Pointable optics – –   Interchangeable optics – 1   Enable/disable Day/Night mode – 1   Enable/disable look-down – 1   Filexible mounting height 1 1   Microwave Doppler range adjustment 1		Pet/small animal immunity	_	_
Alarn memory Image: Image		Pattern masking	_	_
Alarm output NC/NO 2x NC/NO   Pilk supervision 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		Alarm memory		_
PIR supervision Image: Constraint of the supervision Image: Constraint of the supervision   LED indicator Red, green, yellow Red, green   Anti-mask Image: Constraint of the supervision Image: Constraint of the supervision   Tampe: Constraint of the supervision Image: Constraint of the supervision Image: Constraint of the supervision   Ease of installation Self-locking enclosure Image: Constraint of the supervision Image: Constraint of the supervision   Self-locking enclosure Image: Constraint of the supervision Image: Constraint of the supervision Image: Constraint of the supervision   Hinged mounting base Image: Constraint of the supervision Image: Constraint of the supervision Image: Constraint of the supervision   Supervision Image: Constraint of the supervision Image: Constraint of the supervision Image: Constraint of the supervision   Supervision Image: Constraint of the supervision Image: Constraint of the supervision Image: Constraint of the supervision   Supervision Image: Constraint of the supervision Image: Constraint of the supervision Image: Constraint of the supervision   Supervision Image: Constraint of the supervision Image: Constraint of the supervision Im		Alarm output	NC/NO	2x NC/NO
Microwave supervision Image Image<		PIR supervision		_
LED indicator Red, green, yellow Red, green   Anti-mask Imper		Microwave supervision		E.
Anti-mask Imper Imper   Tamper Cover + wall Cover   Insect/dust immuity Immed Immed   Insect/dust immuity Immed Immed   Ease of installation Self-locking enclosure Immed Immed   Self-locking enclosure Immed Immed Immed   Pointable optics Immed Immed Immed   Interchangeable optics Immed Immed Immed   Switchable coverage patterns Immed Immed Immed   Enable/disable Day/Night mode Immed Immed Immed   Enable/disable look-down Immed Immed Immed   Enable/disable look-down Immed Immed Immed   Fendel (abable look-down Immed Immed Immed   PIR sensitivity adjustment Immed Immed Immed   Mounting location Wall, ceiling, octagonal electrical box Wall, ceiling   Installation accessories B334 Swivel Mount included, OH B328 Gimbal-mount, B334 Swivel-mount, B338 Gimbal-mount, B334 Swivel-mount, B334 Swivel		LED indicator	Red, green, yellow	Red, green
TamperCover + wallCoverInsect/dust immunity-Ease of installationTwo-piece design-Self-locking enclosurePinged mounting basePointable opticsInterchangeable opticsSwitchable coverage patternsEnable/disable Day/Night modeEnable/disable LEDEnable/disable look-downSeletable AND/OR gatePinstable mounting heightMicrowave Doppler range adjustmentNicturg locationWall, ceiling, octagonal electrical boxWall, ceilingMounting locationWall, ceiling, octagonal electrical boxMall, ceilingMounting locationS334 Swivel Mount included, OA120-2 MirrorB328 Gimbal-mount, B334 Swivel- mount, B338 Sciling-mountCertificationApprovals/listingsCertificationApprovals/listings		Anti-mask		_
Insect/dust immunity — Immunity   Ease of installation Two-piece design — —   Self-locking enclosure — — —   Hinged mounting base — — —   Pointable optics — — —   Interchangeable optics — — —   Switchable coverage patterns Interchangeable optics — —   Enable/disable Day/Night mode — — … …   Insect/dutable optics — … … … …   Insect/disable Day/Night mode — … … … …   Enable/disable IED … … … … … …   Incovave Doppler range adjustment … …		Tamper	Cover + wall	Cover
Ease of installationTwo-piece design——Self-locking enclosure——Hinged mounting base——Pointable optics——Interchangeable optics——Switchable coverage patterns——Enable/disable Day/Night mode——Enable/disable LED——Enable/disable look-down——Selectable AND/OR gate——PIR sensitivity adjustment——Microware Doppler range adjustment——Adjustable timed relay output——Flexible mounting heightMult, ceiling, octagonal electrical boxMult, ceilingNounting locationMult, ceiling, octagonal electrical boxMult, ceiling-mountRenote walk test———Remote self test———CertificationApprovals/listingsULCE, UL		Insect/dust immunity	_	•
Installation Self-locking enclosure — —   Hinged mounting base — —   Pointable optics — —   Pointable optics — —   Interchangeable optics — —   Switchable coverage patterns — —   Enable/disable Day/Night mode — —   Enable/disable LED — —   Enable/disable look-down — —   Enable/disable look-down — —   Selectable AND/OR gate — —   PIR sensitivity adjustment — —   Microwave Doppler range adjustment — —   Adjustable timed relay output — —   Flexible mounting height — —   Mounting location Wall, ceiling, octagonal electrical box Wall, ceiling   Natallation accessories B334 Swivel Mount included, OA120-2 Mirror B328 Gimbal-mount, B334 Swivel-mount, B338 Ceiling-mount   Mounting location — — — —   Remote walk test —	Ease of installation	Two-piece design	_	_
Hinged mounting base — —   Pointable optics — —   Interchangeable optics — …   Switchable coverage patterns … …   Enable/disable Day/Night mode — …   Enable/disable Day/Night mode … …   Enable/disable Day/Night mode … …   Enable/disable LED … …   Enable/disable look-down … …   Selectable AND/OR gate … …   PIR sensitivity adjustment … …   Microwave Doppler range adjustment … …   Adjustable timed relay output … …   Flexible mounting height … …   Mounting location Wall, ceiling, octagonal electrical box Wall, ceiling   Mounting location Mall, ceiling, OA120-2 Mirror … …   mount, B338 Ceiling-mount, B334 Swivel Mount included, OA10+0 … …   Remote self test … … …   Certification Approvals/listings … …		Self-locking enclosure	_	_
Pointable optics — •   Interchangeable optics ■ ■   Switchable coverage patterns ■ ■   Enable/disable Day/Night mode ■ ■   Enable/disable LED ■ ■   Enable/disable look-down ■ ■   Selectable AND/OR gate ■ ■   PIR sensitivity adjustment ■ ■   Microwave Doppler range adjustment ■ ■   Adjustable timed relay output ■ ■   Flexible mounting height ■ ■   Mounting location Wall, ceiling, octagonal electrical box Wall, ceiling   Mounting location Wall, ceiling, ottagonal electrical box Wall, ceiling-mount, B334 Swivel-mount, B334 Swivel-mount, B334 Swivel-mount, B334 Swivel-mount, B338 Ceiling-mount   Remote walk test ■ ■ ■   Remote self test ■ ■ ■   Certific		Hinged mounting base	_	_
Interchangeable opticsInterchangeable opticsInterchangeable opticsSwitchable coverage patternsISwitchable coverage patternsIEnable/disable Day/Night mode-Enable/disable LEDIEnable/disable look-down-Selectable AND/OR gate-PIR sensitivity adjustmentIMicrowave Doppler range adjustmentIAdjustable timed relay output-Flexible mounting heightIMounting locationWall, ceiling, octagonal electrical boxMounting locationB334 Swivel Mount included, OA120-2 MirrorRemote walk testIRemote self test-CertificationApprovals/listingsULCE, UL		Pointable optics	_	8
Switchable coverage patternsImage: Switchable coverage patternsImage: Switchable coverage patternsEnable/disable Day/Night mode-Image: Switchable Coverage patternsEnable/disable LEDImage: Switchable Coverage patternsImage: Switchable Coverage patternsEnable/disable look-down-Image: Switchable Coverage patternsEnable/disable look-down-Image: Switchable Coverage patternsSelectable AND/OR gate-Image: Switchable Coverage patternsPIR sensitivity adjustmentImage: Switchable Coverage patternsImage: Switchable Coverage patternsMicrowave Doppler range adjustmentImage: Switchable Coverage patternsImage: Switchable Coverage patternsAdjustable timed relay output-Image: Switchable Coverage patternsFlexible mounting heightImage: Switchable Coverage patternsImage: Switchable Coverage patternsMounting locationWall, ceiling, octagonal electrical boxWall, ceilingInstallation accessoriesB334 Swivel Mount included, OA120-2 MirrorB338 Gimbal-mount, B334 Swivel-mount, B338 Ceiling-mountRemote walk testImage: Image:		Interchangeable optics		8
Enable/disable Day/Night mode – Image: Construction of the self test   Enable/disable LED Image: Construction of the self test Image: Construction of the self test   Enable/disable look-down – Image: Construction of the self test   File File Image: Construction of the self test   PIR sensitivity adjustment Image: Construction of the self test Image: Construction of the self test   Nounting location Wall, ceiling, octagonal electrical box Wall, ceiling   Nounting location B334 Swivel Mount included, OA120-2 Mirror B328 Gimbal-mount, B334 Swivel-mount, B338 Ceiling-mount   Remote self test Image: Construction of the self test Image: Construction of the self test   Certification Approvals/listings Image: Construction of the self test Image: Construction of the self test		Switchable coverage patterns		1
Enable/disable LEDImage: Construction of the self testEnable/disable look-down-Enable/disable look-down-Selectable AND/OR gate-PIR sensitivity adjustmentImage: Construction of the self testNicrowave Doppler range adjustmentImage: Construction of testAdjustable timed relay output-Flexible mounting heightImage: Construction of testMounting locationWall, ceiling, octagonal electrical boxMall, ceilingB334 Swivel Mount included, OA120-2 MirrorRemote walk testImage: Construction of testRemote self test-CertificationApprovals/listingsUttCE, UL		Enable/disable Day/Night mode	_	
Enable/disable look-down–Image: Comparison of the section of t		Enable/disable LED		•
Selectable AND/OR gate–Image: Construction of the selectable AND/OR gatePIR sensitivity adjustmentImage: Construction of the selectable AND/OR gateImage: Construction of the selectable AND/OR gatePIR sensitivity adjustmentImage: Construction of the selectable AND/OR gateImage: Construction of the selectable AND/OR gateMicrowave Doppler range adjustmentImage: Construction of the selectable AND/OR gateImage: Construction of the selectable AND/OR gateAdjustable timed relay outputImage: Construction of the selectable AND/OR gateImage: Construction of the selectable AND/OR gateMounting locationWall, ceiling, octagonal electrical boxWall, ceilingMounting locationWall, ceiling, octagonal electrical boxWall, ceilingInstallation accessoriesB334 Swivel Mount included, OA120-2 MirrorB328 Gimbal-mount, B334 Swivel-mount, B338 Ceiling-mountRemote walk testImage: Construction of the selectable AND/OR gateImage: Construction of the selectable AND/OR gateCertificationApprovals/listingsULCE, UL		Enable/disable look-down	_	•
PIR sensitivity adjustment Image: PIR sensitivity adjustment Image: PIR sensitivity adjustment   Microwave Doppler range adjustment Image: PIR sensitivity adjustment Image: PIR sensitivity adjustment   Adjustable timed relay output Image: PIR sensitivity adjustment Image: PIR sensitivity adjustment   Adjustable timed relay output Image: PIR sensitivity adjustment Image: PIR sensitivity adjustment   Adjustable timed relay output Image: PIR sensitivity adjustment Image: PIR sensitivity adjustment   Flexible mounting height Image: PIR sensitivity adjustment Image: PIR sensitivity adjustment   Mounting location Wall, ceiling, octagonal electrical box Wall, ceiling   Installation accessories B334 Swivel Mount included, OA120-2 Mirror B328 Gimbal-mount, B334 Swivel-mount, B338 Ceiling-mount   Remote walk test Image: PIR sensitivity adjustment Image: PIR sensitivity adjustment Image: PIR sensitivity adjustment   Certification Approvals/listings Image: PIR sensitivity adjustment Image: PIR sensitivity adjustment		Selectable AND/OR gate	-	•
Microwave Doppler range adjustment Image: Comparison of the self test   Adjustable timed relay output - Image: Comparison of the self test   Installation accessories Wall, ceiling, octagonal electrical box Wall, ceiling   Installation accessories B334 Swivel Mount included, OA120-2 Mirror B328 Gimbal-mount, B334 Swivel-mount, B338 Ceiling-mount   Remote walk test Image: Comparison of test -   Remote self test - Image: Comparison of test   Certification Approvals/listings UL CE, UL		PIR sensitivity adjustment		8
Adjustable timed relay output — Image: Constraint of the self test   Installation Mail Certification Mail <td< td=""><td></td><td>Microwave Doppler range adjustment</td><td></td><td>•</td></td<>		Microwave Doppler range adjustment		•
Flexible mounting height Image: Constraint of the self test Image: Constraint of test		Adjustable timed relay output	_	•
Mounting location Wall, ceiling, octagonal electrical box Wall, ceiling   Installation accessories B334 Swivel Mount included, OA120-2 Mirror B328 Gimbal-mount, B338 Ceiling-mount   Remote walk test Image: Ceiling test Image: Ceiling test   Certification Approvals/listings Image: Ceiling test		Flexible mounting height		E
Installation accessories B334 Swivel Mount included, OA120-2 Mirror B328 Gimbal-mount, B334 Swivel- mount, B338 Ceiling-mount   Remote walk test Image: Certification Approvals/listings Image: Certification CER, UL		Mounting location	Wall, ceiling, octagonal electrical box	Wall, ceiling
Image: Marking State OA120-2 Mirror mount, B338 Ceiling-mount   Remote walk test Image: Amount State Image: Amount State   Remote self test Image: Amount State Image: Amount State   Certification Approvals/listings Image: Amount State Image: Amount State		Installation accessories	B334 Swivel Mount included,	B328 Gimbal-mount, B334 Swivel-
Remote walk test Image: Comparison of test Image: Comp			OA120-2 Mirror	mount, B338 Ceiling-mount
Remote self test-CertificationApprovals/listingsULCE, UL		Remote walk test		_
Certification Approvals/listings UL CE, UL		Remote self test	—	I.
	Certification	Approvals/listings	UL	CE, UL

	PIR			
Ceiling Mount	Curtain	Wide angle	Low-profile Panoramic	

Description		ISN-CC1-100N	ISN-CC1-50W	DS936	DS937	
Overview	Application type	Medium to Large Commercial	Small to Medium Commercial	Residential to S	mall Commercial	
	Application risk level		Low to mo	derate risk		
	Environment *		Stan	idard		
Specifications	Coverage/range	98 x 9 ft	46 ft (14 m)	24 ft (7 m)	50 ft (14 m)	
		(30 x 2.8 m)	diameter	diameter	diameter	
	Mounting height	8 to	16 ft	7 to 12 ft	8 to 12 ft	
		(2.5 t	o 5 m)	(2.1 to 3.6 m)	(2.4 to 3.6 m)	
	Operating temperature **	-4° to	122°F	-20° to 120°F	14° to 120°F	
		(-20° t	o 50°C)	(-29° to 49°C)	(-10° to 49°C)	
	Operating voltage	9 to 2	8 VDC	10 to 1	15 VDC	
	Current draw (typical)	_	-	_	_	
	Current draw (maximum)	25	mA	20	mA	
Features	First Step Processing	_	_	_	_	
	Sensor Data Fusion	-	-	_	_	
	Microwave noise adaptive processing	-	-	-	-	
	Range adaptive radar	-	-	-	-	
	Motion Analyzer II signal processing	-	-	-	-	
	Motion monitor	-	-	-	-	
	Active white light suppression	-	-	-	-	
	Dynamic temperature compensation	_	-	-	-	
	Wall-to-wall coverage	-	-	-	-	
	Tri-focus optics	-	-	-	-	
	Look-down zone	-	-	-	-	
	Pet/small animal immunity	-	-	-	-	
	Pattern masking	-	-		•	
	Alarm memory	-	-	-	-	
	Alarm output	NC	/NO	N	IC	
	PIR supervision	-	-	-	-	
	Microwave supervision	-	-	-	-	
	LED indicator	R	ed	Red,	yellow	
	Anti-mask	-	-	-	-	
	Tamper		Со	ver		
	Insect/dust immunity	-	-		•	
Ease of	Two-piece design	-	-	-	-	
installation	Self-locking enclosure	_	-	_	-	
	Hinged mounting base	_	-	_	-	
	Pointable optics	Vertical 33°	Vertical 30°	Rotatio	otational ±15°	
	Interchangeable optics	-	-	_	-	
	Switchable coverage patterns	-	-	-	-	
	Enable/disable LED					
	Enable/disable look-down	-	-	-	-	
	Selectable AND/OR gate	-	-	-	-	
	PIR sensitivity adjustment					
	Microwave Doppler range adjustment	-	-	-	-	
	Adjustable timed relay output	_	_	_	_	
	Flexible mounting height		•		•	
	Mounting location	Cei	iling	Ceiling:	surface	
	Installation accessories	-	-	_	_	
	Remote walk test	-	-	-	—	
	Remote self test	-	-	-	-	
Certification	Approvals/listings	l	JL	CCC, CE, UL	CE, UL	

\* 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 86°F (30°C), a detector that could be exposed to bright white light (car headlights, floodlights, direct sunlight, etc.)

		PIR	TriTech® (PIR + MW)	PIR	TriTech <sup>®</sup> (PIR + MW)
		Panoramic	( ,	High-Performance P	Panoramic
Description		DS938Z	DS9360	DS939	DS9370/DS9371
Overview	Application type	Residential to Medium Commercial	Sr	nall to Large Commer	cial
	Application risk level	Low to moderate risk		Moderate risk	
	Environment *	Standard	Difficult	Standard	Difficult
Specifications	Coverage/range	60 ft (18 r	n) diameter	70 ft (21 n	n) diameter
	Mounting height	8–18 ft (2	2.4-5.5 m)	8–25 ft (2	2.4–7.6 m)
	Operating temperature **	–20° to 120°F (–29° to 49°C)	-40	° to 120°F (-40° to 49	9°C)
	Operating voltage	6 to 1	L5 VDC	9 to 1	.5 VDC
	Current draw (typical)	18	mA	12 mA	19 mA
Features	First Step Processing	_	_		•
	Sensor Data Fusion	_	_	_	_
	Microwave noise adaptive processing	—		-	
	Range adaptive radar	—	-	-	-
	Motion Analyzer II signal processing			-	-
	Motion monitor			_	-
	Active white light suppression	_	_	_	-
	Dynamic temperature compensation	—	_		
	Wall-to-wall coverage	_	_	_	_
	Iri-focus optics	_	_	_	_
	Look-down zone	-	_	_	_
	Pet/small animal immunity		_	_	_
	Alarm mamori	•		•	
	Alarm output				•
	PIP supervision	-		-	_
	Microwaye supervision	-		-	-
		Red	Red vellow green	Blue	Blue vellow red
	Anti-mask		–		
	Tamper	C	over	Cover	+ wall
	Insect/dust immunity	_	_		
Fase of	Two-niece design	_	_	-	-
installation	Self-locking enclosure	_	_		
	Hinged mounting base	_	_	_	
	Pointable optics	_	_	_	_
	Interchangeable optics			_	_
	Switchable coverage patterns			_	-
	Enable/disable LED				
	Enable/disable look-down	_	_	_	-
	Selectable AND/OR gate	_	_	_	_
	PIR sensitivity adjustment				
	Microwave Doppler range adjustment	_		_	
	Adjustable timed relay output	_	_	_	_
	Flexible mounting height				
	Mounting location		Cei	iling	
	Installation accessories	_	_	_	-
	Remote walk test	_	_		
	Remote self test	_	_	_	
Certification	Approvals/listings	AFNOR, CCC, CE, EN50131–2–2 Grade 2, UL	AFNOR, CE, EN50131-2-4 Grade 2, FCC,	AFNOR, CCC, CE, EN50131-2-2 Grade 2, INCERT III	AFNOR, CCC, CE, EN50131-2-4 Grade 2, FCC,

#### PIR Recessed



Description		DS915
Overview	Application type	Residential to Small Commercial
0.00.000	Application risk level	Low to moderate risk
	Environment *	Standard
Specifications	Coverage/range	30 x 38 ft (9 x 11.5 m)
opeenieutienie	Mounting height	3 to 8 ft (0.9 to 2.5 m)
	Operating temperature **	-20° to 130°F (-30° to 55°C)
	Operating voltage	10 to 15 VDC
	Current draw (typical)	_
	Current draw (maximum)	20 mA
Features	First Step Processing	
	Sensor Data Fusion	_
	Microwave noise adaptive	
	processing	-
	Range adaptive radar	_
	Motion Analyzer II signal processing	_
	Motion monitor	_
	Active white light suppression	_
	Dynamic temperature compensation	_
	Wall-to-wall coverage	_
	Tri-focus optics	_
	Look-down zone	-
	Pet/small animal immunity	_
	Pattern masking	-
	Alarm memory	_
	Alarm output	NC
	PIR supervision	_
	Microwave supervision	_
	LED indicator	Red
	Anti-mask	I
	Tamper	_
	Insect/dust immunity	_
Ease of	Two-piece design	_
installation	Self-locking enclosure	_
	Hinged mounting base	_
	Pointable optics	Horizontal ±10° Vertical +2° to -14°
	Interchangeable optics	_
	Switchable coverage patterns	I
	Enable/disable Day/Night mode	_
	Enable/disable LED	I
	Enable/disable look-down	_
	Selectable AND/OR gate	-
	PIR sensitivity adjustment	_
	Microwave Doppler range adjustment	_
	Adjustable timed relay output	_
	Flexible mounting height	I.
	Mounting location	Wall (flush mount)
	Installation accessories	-
	Remote walk test	_
	Remote self test	-
Certification	Approvals/listings	UL

\* 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 86°F (30°C), a detector that could be exposed to bright white light (car headlights, floodlights, direct sunlight, etc.)



#### **RADION wireless<sup>†</sup>**

Superior Range and Reliability

Pet Friendly<sup>®</sup> Standard Pet Friendly<sup>®</sup> Curtain

TriTech<sup>®</sup> (PIR + MW) Pet Friendly<sup>®</sup> Standard

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Description		RFPR-12	RFPR-C12	RFDL-11
Overview	Application type	Re	esidential to Small Commerc	ial
	Application risk level		Low to moderate risk	
	Environment *	Stan	dard	Difficult
Specifications	Frequency		433.42 MHz	
	Coverage/range	40 x 40 ft (12 x 12 m)	40 x 5 ft (12 x 1.5 m)	35 x 35 ft (11 x 11 m)
	Mounting height	7.2 to 9 ft (2.1 to 2.75 m)	7 to 8.5 ft (2.1 to 2.6 m)	6.5 to 8 ft (2.0 to 2.4 m)
	Operating temperature **		14° to 120°F (-10° to 49°C)	
	Operating voltage	3 V	/DC	6 VDC
	Power source	One CR123A L	ithium Battery	Four AA Alkaline Batteries
	Battery life		Up to 5 years	
Features	First Step Processing			
	Sensor Data Fusion	_	_	_
	Motion analyzer II		_	_
	signal processing	•	•	•
	Microwave noise			_
	adaptive processing	_	—	•
	Range adaptive radar	_	_	_
	Active white light suppression	_	_	_
	Dynamic temperature			
	compensation	•	•	•
	Wall-to-wall coverage			
	Tri-focus optics	_	_	_
	Look-down zone			
	Pet/small animal immunity	30 lb (13 kg)		100 lb (45 kg)
	Alarm memory			-
	Alarm output			
	LED indicator		Blue	
	Anti-mask	_	_	-
	Tamper		Cover + wall	
	Insect/dust immunity			
Ease of	Two-piece design			
installation	Self-locking enclosure	_	_	_
	Interchangeable mounting base	_	_	_
	Bubble level			•
	Removable lift-gate			
	terminal strips	_	-	—
	No-adjust installation			_
	Enable/disable LED	_	_	_
	Enable/disable pet immunity	_	_	•
	Enable/disable look-down			
	Switchable detection patterns	_	_	_
	PIR sensitivity adjustment	_	_	_
	Microwave Doppler range adjustment	_	_	
	Flexible mounting height			-
	Mounting location	-	Surface, semi-flush_corper	-
	Installation accessories	B328 Gimbal-mo	unt B335 Swivel-mount B3	38 Ceiling-mount
	Remote walk test		∎	
	Remote self test	•	-	-
Certification	Approvals/listings		CE EN50131 Grade 2 ECC	

PIR

\* 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.

\* 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 86°F (30°C), a detector that could be exposed to bright white light (car headlights, floodlights, direct sunlight, etc.)

		Glass break	Door/Window Contacts		Other			
		Acoustic	Surface Mount	Recessed Mount	Universal Transmitter	Smoke		
Description		RFGB	RFDW-SM	RFDW-RM	RFUN	RFSM		
Specifications	Frequency			433.42 MHz				
	Coverage/range	20 ft (6 m) diameter	_	-	_	0.14 +/-0.04 bM/m		
	Mounting height	_	_	_	_	_		
	Mounting gap	-		_				
	Operating temperature **		14° to 120°F (-10° to 49°C)					
	Operating voltage	3 VDC		3 VDC				
	Power source	One CR123A Lithium Battery	One AAA Lithium Battery	One AAA Lithium Battery	One CR123A Lithium Battery	Two CR123A Lithium Batteries		
	Battery life			Up to 5 years				
Features	LED indicator	Red	—	—	—	Red		
	Tamper	Cover	+ wall	Cover	Cover	+ wall		
Ease of installation	Mounting location	Wall, ceiling	Surface	Recessed	Surface	Ceiling, wall		
Certification	Approvals/listings	ANATEL, CCC, CE, EN50131, FCC, IC, INCERT, RCM, UL RCM, U				ANATEL, CE, CSFM, FCC, IC, RCM, UL		

		Portable				Other		
		Keyfob		Panic Button		Bill Trap		
Description		RFKF-TB RFKF-TBS	RFKF-FB RFKF-FBS	RFPB-SB	RFPB-TB	RFBT		
Specifications	Frequency		433.42 MHz					
	Coverage/range	_	_	-	-	-		
	Mounting height	_	—	_	—	-		
	Mounting gap	-	_	-	_	-		
	Operating temperature **		14° to 120°F (-10° to 49°C)					
	Operating voltage		3	VDC		1.5 VDC		
	Power source		One Lithium CR2032 Battery					
	Battery life			Up to 5 years				
Features	LED indicator		F	Red		•		
	Tamper	-	_	-	_	Cover, wall		
	Synchronized Encryption	∎(FBS, TE	3S models)	_	_	_		
Ease of installation	Mounting location	-	_	_	_	Cash Drawer		
Certification	Approvals/listings	ANATEL, CCC, CE, EN50131, FCC, IC, INCERT, RCM, UL						

#### PIR TriTech® (PIR+MW) **Premises Wireless (ZigBee)** Standard Standard RADION ZB **Commercial Type Number RFPR-ZB** RFDL-ZB Overview Application risk level Low to moderate risk Standard Difficult Environment \* Specifications Frequency 2.4 GHz

Features	Coverage/range	40 x 40 ft (12 x 12 m)		
	Mounting height	7.5 to 9 ft (2	2.3 to 2.7 m)	
	Operating temperature **	14° to 131°F (-10° to 55°C)		
	Operating voltage	3 V	/DC	
	Power source ***	One CR123A L	ithium Battery	
	Battery life ***	Up to 6 years	Up to 3 years	
	First Step Processing			
	Microwave noise adaptive processing	-	I	
	Dynamic temperature compensation	•	I	
	Wall-to-wall coverage			
	Look-down zone			
	Pet/small animal immunity	45 lb (20 kg)	100 lb (45 kg)	
	Anti-mask	_	_	
	Tamper	Cover	+ wall	
	Sealed optical chamber			
Ease of installation****	No-adjust installation	•	I	
	Enable/disable LED			
	Enable/disable pet immunity			
	Enable/disable look-down			
	Microwave Doppler range adjustment	-	I	
Certificates		FCC, IC, cETLus, ZigBee, iControl		

\* 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 86°F (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 32° to 120°F (0° to 49°C), indoor use.

\*\*\* Power source has capacity for an additional battery increasing the battery life from 6 to 10 years (RFPR-ZB) or from 3 to 6 years (RFDL-ZB).

\*\*\*\* All models feature a two-piece design, self-locking enclosure, interchangeable mounting base and integrated bubble level.



#### Specialty

Request-to-exit

ndard	High-performance

1

Description		D6150	DC151;	D\$160	DC161		
Description	Calar	DS1501	DSISI	DS100	DS101		
Overview	Color	Light gray	Light gray Black Light gray Black				
Specifications	Optics	Freshei lens					
	Coverage/range	7 40 5 4	8 x 10 ft (2.4 x 3.0 m)				
	Mounting height	7–10 ft (	2.1-3 m)	7.5–15 ft (	2.3–4.6 m)		
	Operating temperature		-20° to 120°F (-29° to 49°C)				
	Operating voltage	12 VAC or VDC;	24 VAC or VDC	12 VAC or VDC;	; 30 VAC or VDC		
	Current draw (typical)	26 mA	nominal	8 mA r	nominal		
Features	Door monitor with sounder	_	_				
	Keycard reader input	-	_				
	Sequential logic input	-	_				
	Relay fall safe/fall secure						
	Relay settable select						
	Relay latch time adjustment	0.25 - 60 sec		0.5 - 64 sec			
	Pattern masking						
	Alarm output		2 relays	s, NC/NO			
	LED indicator						
	Tamper switch	_	—				
Ease of	Pointable optics	Vertical Adjustment					
installation	Switchable relay mode						
	Switchable timer reset mode						
	Adjustable sounder volume	_	_				
	PIR sensitivity adjustment						
	Enable/disable LED	_	_				
	Flexible mounting height						
	Mounting location		Wall,	ceiling			
	Installation accessories		,	TP160 Trim	TP161 Trim		
		1P160 Trim Plate	IP161 Trim Plate	PlateSounder Cover	PlateSounder Cover		
Certification	Approvals/listings		UL	, CE			

ID

PIR Star

\* 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 86°F (30°C), a detector that could be exposed to bright white light (car headlights, floodlights, direct sunlight, etc.)

		Acoustic					
<b>Specialty</b> Glass Break		Standard				Combo Magnetic Contact	
					:	•	
Description		DS1101i	DS1108i	DS1102i	DS1103i	DS1109i	
Overview	Application type		Residential to Large Commercial				
	Application risk level		Low to Moderate Risk				
	Environment *	Standard					
Specifications	Coverage/range		25 ft (7.6 m) 10 ft (3 m) diameter diameter				
	Operating temperature		-20° to 120°F (-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	
Features	Sound Analysis Technology (SAT) processing	NC/NO	NC	NC/NO	NC		
	Alarm output						
	LED indicator						
	Tamper				—		
Ease of installation	Mounting location		Wall, ceiling		Wall, ceiling (Flush)	Door, window frame	
	Installation accessories		DS1	110i Glassbreak T	ester		
Certification	Approvals/listings	CCC, CE, UL					

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#### Specialty

Photoelectric Beam

#### Dual Beam Short Range



Medium Range

Description		ISC-FPB1-W30DS	ISC-FPB1-W60DS	ISC-FPB1-W90DS		
Overview	Туре	Photobeam 3000				
	Application type	R	esidential to Large Commerci	al		
Specifications	Coverage/range indoor	200 ft (60 m)	400 ft (120 m)	600 ft (180 m)		
	Coverage/range outdoor	100 ft (30 m)	200 ft (60 m)	300 ft (90 m)		
	Response time		50 ms to 700 ms			
	Operating temperature *		-13° to 131°F (-25° to 55°C)			
	Operating voltage	10.5 VDC to 28 VDC				
	Current draw (typical)	6 mA (transmitter)	10 mA (transmitter)	15 mA (transmitter)		
		24 mA (receiver)	24 mA (receiver)			
	Environmental rating	IP55				
Features	Pulsed Active IR					
	Multi-channel operation	_	_	_		
	Beam Power Control (BPC)	_	_	_		
	Dual modulated beam	_	_	_		
	Environmental discrimination	_	_	—		
	Alarm output		NC/NO			
	Tamper output		NC			
	EDC output	_	_	_		
	LED indicator	_	_	_		
	Draft/insect immunity	•				
Ease of	Pointable optics		Horizontal ±90° Vertical ±5°			
installation	Selectable response time					
	Test features		Voltage output (for alignment	)		
	Mounting location	Surface, pole				

\* 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 86°F (30°C), a detector that could be exposed to bright white light (car headlights, floodlights, direct sunlight, etc.)

		Quad Beam					
Specialty		Medium Range	Long Range				
Photoelectric Beam							
Description		ISC-FPB1-W60QS ISC-FPB1-W60QF	ISC-FPB1-W120QS ISC-FPB1-W120QF	ISC-FPB1-W200QS ISC-FPB1-W200QF			
Overview	Туре		Photobeam 5000				
	Application type	R	Residential to Large Commercial				
Specifications	Coverage/range indoor	393 ft (120 m)	787 ft (240 m)	1,181 ft (360 m)			
	Coverage/range outdoor	196 ft (60 m)	393 ft (120 m)	656 ft (200 m)			
	Response time	40 ms to 500 ms					
	Operating temperature *		-13° to 140°F (-25° to 60°C)				
	Operating voltage	10.5 VDC to 28 VDC					
	Current draw (typical)	90/120 mA (transmitter)	95/124 mA (transmitter)	100/128 mA (transmitter)			
		24 mA (receiver)	24 mA (receiver)	24 mA (receiver)			
	Environmental rating	IP66					
Features	Pulsed Active IR	•					
	Multi-channel operation		■ (QF models)				
	Beam Power Control (BPC)	•		8			
	Dual modulated beam						
	Environmental discrimination						
	Alarm output		NC/NO				
	Tamper output		NC				
	EDC output		NC				
	LED indicator						
	Draft/insect immunity						
Ease of	Pointable optics		Horizontal ±90° Vertical ±10°				
installation	Selectable response time						
	Test features	Volta	ge output and LEDs (for align	ment)			
	Mounting location	Surface, pole					

\* QS – single channel

QF — four channel

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<b>Specialty</b> Seismic/Shock		Seismic		Shock
		Standard	High-performance	Standard
		6	0	• Ven
Description		ISN-SM-50	ISN-SM-80	ISC-SK10
Overview	Туре	Thermal, Mechanical, Explosive, Water Attack Detection	Thermal, Mechanical, Explosive, Water Attack Detection	Mechanical Attack Detection
	Application type	Small to Large Commercial		Residential to Large Commercial
	Application risk level		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>	1.5–3.5 m radius
	Operating temperature	-40° to 158°F (-40° to 70°C)		14° to 131°F (-10° to 55°C)
	Operating voltage	8 to 16 VDC		9 to 15 VDC
	Current draw (typical)	3 mA		8.5 mA
	Environmental rating	IP43		
Features	Anti-drilling shield			—
	Temperature supervision	•		_
	Voltage monitoring	•		—
	Automatic self test	•		_
	Local event memory	_		_
	Alarm output	NC Solid State Relays		
	LED			Green, red
	Tamper	Cover, wall		Cover
Ease of	Intelligent installation mode	_	—	
Installation	Mounting and function test	•	•	
	Sensitivity adjustment		•	
		Steel, concrete		Any
		Anti-drill Foil ISN-GMX-B0 Floor Socket ISN-GMX-P0 Mounting Plate ISN-GMX-P3S Swivel Plate ISN-GMX-S1 Test Transmitter ISN-GMX-W0 Wall Mounting Kit	ISN-GMX-D7 Anti-drill Foil ISN-GMX-B0 Floor Socket ISN-GMX-P0 Mounting Plate ISN-GMX-S1 Test Transmitter ISN-GMX-W0 Wall Mounting Kit	_
O antifi a ti	Software options	ISN-SMS-W7 Sen	STOOL PC Software	-
Certification	Approvals/listings	CCC, CE, NCP, VdS, UL		CCC, CE

\* 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 86°F (30°C), a detector that could be exposed to bright white light (car headlights, floodlights, direct sunlight, etc.)

#### Accessories

Mounting and installation				
AE774	Metal Enclosure			
	For use in areas where some physical abuse is expected.			
B328	Gimbal-mount Bracket			
	Mounts on a single-gang box and allows rotation of a detector. Wires are hidden inside.			
B335	Swivel-mount Bracket			
	Heavy-duty wall or ceiling bracket for mounting a detector to standard electrical single-gang switch or outlet box.			
B338	Ceiling-mount Bracket			
	Mounts detector to the ceiling. Do not use for pet applications.			
MP1	Metal Pole			
	3 ft (1 m) straight metal poles for mounting photoelectric detectors. Shipped in packages of two.			
MP2	Metal Pole			
	4 ft (1.2 m) straight metal poles for mounting photoelectric detectors. Shipped in packages of two.			
MP3	L-Curved Metal Pole			
	Curved metal poles for mounting photoelectric detectors to vertical surfaces. Shipped in packages of two.			
PC1A	Weather Enclosure			
	Protects photoelectric detectors when mounted outside. Shipped in packages of two.			
PC3A	Back-to-back Box			
	Allows back-to-back mounting of photoelectric detectors on a pole. Shipped individually.			
TP160	Trim Plate–Light Gray			
	For mounting the REX detector over a standard single-gang box.			
TP161	Trim Plate–Black			
	For mounting the REX detector over a standard single-gang box.			
TR12	TR12 Transformer			
	12 VAC, 0.93 A.			
ISN-GMX-D7	Anti-drill Foil			
	Provides drill protection for ISN-SM seismic detectors.			
ISN-GMX-B0	Floor Socket			
	For floor mounting a seismic detector.			
ISN-GMX-P0	Mounting Plate			
	Mount seismic detectors to steel or concrete surface.			
ISN-GMX-P3S	Swivel Plate			
ICNI CMY C1	For use with ISN-SM-50 seismic detectors, monitors safes and strong rooms with exposed keynoles.			
ISIN-GIVIX-SI	Test Transmitter			
ISN CMY WO	Nell Mounting Kit			
	For surface or fluch mounting a soismic detector to the wall			
Other				
DS1110i	Glassbreak lester			
	Used to test DS11011, DS11021, DS11031, and DS11081 Glass Break Detectors. 9V alkaline battery included.			
PU12T	Dhatahaam Haatar			
01121	Filolopean mealer Coromic heater with athematic temperature control. Provents frost accumulation on photoelectric hears detector			
ISN_SMS_W/7	Senstaal PC Software			
1314-31413-447	Programming software for seismic detectors			
	Togramming sortware for seisinic delectors.			

## Feature Index

Feature	Description		
Active White Light Suppression	Processes both infrared and white light to eliminate false alarms caused by stray lights such as passing car headlights.		
Adjustable Optics	Adjust the mirrors or lenses to optimize the coverage pattern.		
Alarm Memory	If the system is turned on, the Alarm Memory remembers if an alarm event occurred. When the system is turned off, the alarm LED latches (turns on), if the Alarm Memory stored an alarm event.		
AND / OR Mode	The detectors can be configured to cause an alarm either when all four beams are blocked, or when either the upper or the lower beams are blocked. This detects smaller objects and eliminates the possibility of climbing over or crawling under the beams.		
Cover Tamper	A normally-closed contact opens when the cover is removed and sends a signal to the control panel.		
Day / Night Mode	Set the jumper or switch to specify whether or not the unit reports alarm situations only during the night. Setting the jumper or switch to ON suppresses the alarm and timed relays during daylight. If the LEDs are enabled, then LED indications continue.		
Door Monitor With Sounder	The sounder activates if the door opens without motion detected. The sounder activates if the door is held open too long after detecting motion.		
Draft / Insect Immunity	The sealed optical chamber prevents drafts and insects from affecting the detector.		
Environmental Discrimination Circuitry	Monitors the gradual loss of a signal due to dust, fog, rain, snow, and so on. A normally-closed contact opens when signal loss reaches 99%.		
EOL Resistors	Integrated jumper-selectable end-of-line resistors simply the wiring process and reduce installation time.		
First Step Processing (FSP)	Allows virtually instant response to human intruders without generating false alarms for 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. Each sensor (PIR and microwave) is processed individually, and the alarm relay does not activate unless both sensors agree there is an alarm.		
Inhibit Wiring	An optional feature that compares an electrical signal synchronized with the light beam to the light beam. This minimizes false alarm events by eliminating other disturbances such as an external light sources or dust.		
Interchangeable Optics	Alter the PIR pattern by changing the mirror or lens.		
IP Rating	A rating system for different environmental conditions.		
Keycard Reader Input	The relay outputs activate when a signal is received from a keycard reader.		
LED Enable or Disable	Setting the alarm LED jumper or switch in the detector to ON allows the LED to display an alarm. Setting the jumper or switch to OFF disables the LED alarm display.		
Linear Travel Distance Microwave	This microwave signal processor measures the linear travel distance of a target to make an alarm decision. It eliminates alarms for objects that move but do not travel, such as tree limbs and hanging signs.		
Microwave Adaptive Processing	Adaptive processing uses pattern recognition circuitry to identify and ignore repetitive false alarm sources. It adjusts to background disturbances to reduce false alarms without sacrificing the ability to respond to an intruder.		
Microwave Detection Sensitivity Adjustment	Adjust the microwave sensitivity for each application at installation.		
Microwave Supervision	The detector periodically verifies that the microwave system operates correctly.		
Motion Analyzer II Signal Processing	This PIR signal processor uses multiple thresholds and timing windows to analyze timing, amplitude, duration, and polarity of signals to make an alarm decision. Extreme levels of thermal and illumination disturbances caused by hot and cold drafts, sunlight, or lightning do not cause an alarm.		
Motion Monitor	Motion monitor supervision timers verify that the detector's field of view is not blocked.		
Multiple Channel Operation	The detectors can be configured for up to eight different channels. Multiple units can be used near one another without the possibility of receiver cross-talk. This is particularly useful when stacking multiple beam sets.		
No Adjustment Installation	No adjustments are required to install the detector. Optional features might be available.		
Noise Voltage Output	To eliminate false alarm sources, use the test pins provided to connect a voltmeter for testing background noise measurements.		
Pattern Masking	Use the masking kit provided to customize the size of the coverage pattern.		

## Feature Index

Feature	Description
Pet Immunity	Does not detect pets and animals on the floor inside the coverage area.
PIR Detection Sensitivity Adjustment	Adjust the PIR sensitivity for each application at installation.
PIR Supervision	The detector periodically verifies that the PIR system operates correctly.
Relay Fail Safe / Fail Secure	During a power failure, the relay can be set to unlock the door or keep the door locked.
Relay Outputs	Electrical contacts activate when motion is detected.
Relay Settable Select	The relay activation time can be set to reset upon additional motion detection.
Remote Walk Test	Enable the Walk Test from the control panel or keypad.
Selectable Beam Interruption Time Control	Adjust the beam interruption time to best fit the application.
Sensor Data Fusion	Uses sophisticated software to constantly adjust and balance the sensitivity of multiple sensors, resulting in the most accurate alarm decision.
Sequential Logic Input (SLI)	Two motion detectors provide higher security for unauthorized entry. If the first motion detector senses movement towards the door, the second motion detector verifies the movement.
Spare Terminals	Use the extra terminals to connect EOL resistors, shield wires, and so on.
Temperature Compensation	The detector automatically monitors the ambient temperature and adjusts its signal processing to maintain its ability to identify human intruders at critical temperatures.
Tri-Focus Optics	Includes three lenses with 3 focal lengths: 86 detection zones, which combine to make 11 solid curtains of detection.
Trouble Output	A normally-closed contact opens when a trouble condition occurs and sends a signal to the control panel.
Two-Piece Design	The back of the detector is a mounting plate. The front of the detector contains all the electronics and lenses or mirrors under a protective cover.
User-Selectable Look-Down Zone	Detects intruders near the detector.
Wall Tamper	A normally-closed contact opens when the detector is removed from the wall and sends a signal to the control panel.

#### Notes

#### Notes

#### A Tradition of Quality and Innovation

For 125 years, the Bosch name has stood for quality and reliability. Bosch is the global supplier of choice for innovative technology backed by the highest standards for service and support.

Bosch Security Systems proudly offers a wide range of security, safety, communications and sound solutions that are relied upon every day in applications around the world, from government facilities and public venues to businesses, schools and homes.



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