

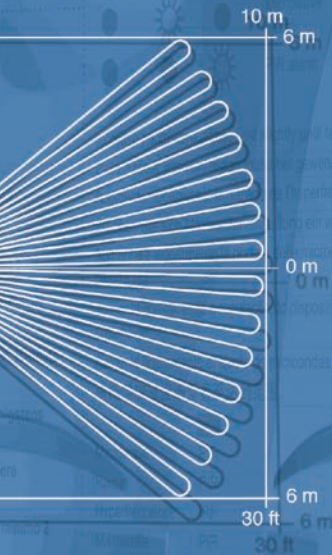
Intrusion Detector

Selection Guide



BOSCH

Invented for life



Technical Specifications

Environmental Considerations

Complies with EN50131 Environmental Class II, Security Grade 2

Relative Humidity: 0 to 85%, non-condensing

Temperature (operating): -29°C to +49°C (-20°F to +120°F)

For UL Listed product installations, 0°C to +49°C (+32°F to +120°F)

Mechanical Properties

Color: White

Dimensions: 13.2 cm x 6.1 cm x 4.8 cm (5.2 in. x 2.4 in. x 1.9 in.)

Material: High-impact ABS plastic

Radio Frequency Interference (RFI) Immunity: No alarm or setup on critical frequencies in the range from 26 MHz to 950 MHz at field strengths less than 50 V/m.

Outputs

Digital Alarm: 5 V normally, ground for 4 sec during alarm.

Relay: Solid state, supervised Form A normally-closed (NC) contacts rated for 125 mA, 28 VDC, 3 W.

Tamper: Normally-closed (NC) contacts (with cover on) rated at 28 VDC, 125 mA maximum. Connect tamper circuit to 24-hour protection circuit.

Power Requirements

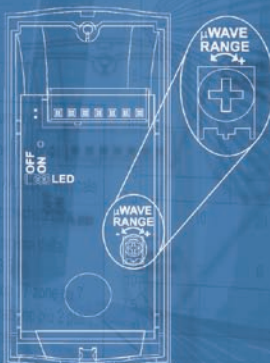
Current (Alarm): 22 mA

Current (Standby): 15 mA maximum at 12 VDC

Voltage (Operating): 10 VDC to 14 VDC

Trademarks

Pet Friendly® and TriTech® are registered trademarks of Bosch Security Systems in the United States.



Bosch – Your single source for intrusion detectors.



Intelligent intrusion detection is a delicate balance between rapidly responding to real security breaches and ignoring costly false alarm triggers. Bosch Security Systems' award-winning detectors set the standard for reliability and rapid detection with superior false alarm immunity. Our intrusion detection devices can handle the toughest applications, from cavernous warehouses to long corridors, high ceilings to homes with pets.



We offer intrusion detectors for almost any application. Our complete line includes:

- Passive Infrared (PIR)
- Combination PIR and microwave
- Long-range PIR
- 360° ceiling mount PIR
- Photoelectric beam
- Request-to-Exit PIR
- PIR with integrated CCD camera
- Glass break
- Pet/animal immune
- Seismic



Contents

01	Introduction
02	Professional Series
04	Blue Line
07	Classic Line
12	Long-range
13	Ceiling-mount
15	Commercial Line
16	Request-to-Exit
17	Glass Break
17	Seismic
18	Photo Beams
19	New Sensor Naming Convention
21	Feature Index

Professional Series

ISC-PPR1-W16



ISC-PDL1-W18x



§

	Mounting Type	Wall	Wall
	Detection Technology	PIR	PIR/Microwave
	Description	Standard PIR	TriTech+
Application	Passive Infrared (PIR) Sensor	Two Dual Element Sensors	Two Dual Element Sensors
	Microwave Doppler Radar	—	Range Adaptive Radar
	Environmental Conditions	Harsh	Harsh
	Security/Risk Level	High	High
	Small Animal Immunity, Pet Friendly	4.5 kg (10 lb.)	4.5 kg (10 lb.)
	Operating Temperature †	-29° to +55° C (-20° to +130°F)	-29° to +55° C (-20° to +130°F)
Installation	Optics	Tri-focus Fresnel Lenses with 86 Zones	
	Coverage/Range	16m x 21m (50 ft. x 70 ft.) 7.5m x 10m (25 ft. x 33 ft.)	18m x 25m (60 ft. x 80 ft.) 7.5m x 10m (25 ft. x 33 ft.)
	Mounting Height	2.1 to 3m (7 to 10 ft.)	
	No Adjust Mounting Height	•	•
	User-selectable Look Down Zone	•	•
	Enclosure Design	Two-piece, Self-locking, Screwless	Two-piece, Self-locking, Screwless
	Mounting Bracket Options	B328, B335, B338*	B328, B335, B338*
Features	Sensitivity Level Adjustment	—	•
	Alarm Memory	•	•
	Anti-mask Detection	—	Microwave Only
	Cover Tamper	•	•
	Draft/Insect Immunity	•	•
	LED Disable	•	•
	Remote Self Test	•	•
	Remote Walk Test	•	•
	Temperature Compensation	Dynamic	Dynamic
	Trouble Output	•	•
Wall Tamper	•	•	
	Regulatory Approvals	AFNOR, C-Tick, CE, cULus, EN50131-2-2 Grade2, IMQ, INCERT, NEL, NOR, POL, VdS	AFNOR, BZL, C-Tick, CE, cULus, EN50131-2-4 Grade 2, FCC, IC, IMQ, INCERT, NEL, NOR, POL
Electrical	Alarm Output	NC Solid State Relay	NC Solid State Relay
	Operating Voltage	9 to 15 VDC	9 to 15 VDC
	Current Draw (min/max) – mA	10/15	13/25
	Signal Processing	Sensor Data Fusion	Sensor Data Fusion
	Additional Features	Active White Light Suppression, Self-adjusting LED Brightness, Removeable Terminal Strips, Integrated Horizontal, Vertical Bubble Levels	Active White Light Suppression, Self-adjusting LED Brightness, Removeable Terminal Strips, Integrated Horizontal, Vertical Bubble Levels
	Options		

* B338 bracket offers an optional tamper feature.

§ Frequency for dual detector part number G=10,525 GHz and H=10,588 GHz.

Professional Series

ISC-PPR1-WA16x



ISC-PDL1-WA18x



	ISC-PPR1-WA16x	ISC-PDL1-WA18x
Mounting Type	Wall	Wall
Detection Technology	PIR/Microwave	PIR/Microwave
Description	PIR/Microwave with Antimask	TriTech+ with Antimask
Passive Infrared (PIR) Sensor	Two Dual Element Sensors	Two Dual Element Sensors
Microwave Doppler Radar	False Alarm Filtering Radar	Range Adaptive Radar
Environmental Conditions	Harsh	Harsh
Security/Risk Level	High	High
Small Animal Immunity, Pet Friendly	4.5 kg (10 lb.)	4.5 kg (10 lb.)
Operating Temperature †	-29° to +55° C (-20° to +130°F)	-29° to +55° C (-20° to +130°F)
Optics	Tri-Focus Fresnel Lenses with 86 Zones	
Coverage/Range	16m x 21m (50 ft. x 70 ft.) 7.5m x 10m (25 ft. x 33 ft.)	18m x 25m (6 ft. x 80 ft.) 7.5m x 10m (25 ft. x 33 ft.)
Mounting Height	2.1 to 3m (7 to 10 ft.)	2.1 to 3m (7 to 10 ft.)
No Adjust Mounting Height	•	•
User-selectable Look Down Zone	•	•
Enclosure Design	Two-piece, Self-locking, Screwless	Two-piece, Self-locking, Screwless
Mounting Bracket Options	B328, B335, B338*	B328, B335, B338*
Sensitivity Level Adjustment	—	•
Alarm Memory	•	•
Anti-mask Detection	Multi-point, Active IR with Spray Detect	Multi-point, Active IR with Spray Detect
Cover Tamper	•	•
Draft/Insect Immunity	•	•
LED Disable	•	•
Remote Self Test	•	•
Remote Walk Test	•	•
Temperature Compensation	Dynamic	Dynamic
Trouble Output	•	•
Wall Tamper	•	•
Regulatory Approvals	FCC, CE, cULus, EN50131-2-2 Grade3	FCC, CE, cULus, EN50131-2-4 Grade 3
Alarm Output	NC Solid State Relay	NC Solid State Relay
Operating Voltage	9 to 15 VDC	9 to 15 VDC
Current Draw (min/max) – mA	18/26	18/26
Signal Processing	Sensor Data Fusion	Sensor Data Fusion
Additional Features	Active White Light Suppression, Self-adjusting LED Brightness, Removeable Terminal Strips, Integrated Horizontal, Vertical Bubble Levels	Active White Light Suppression, Self-adjusting LED Brightness, Removeable Terminal Strips, Integrated Horizontal, Vertical Bubble Levels
Options	Available with LSNI	Available with LSNI Available with supervised NO Form B relay

* B338 bracket offers an optional tamper feature.

§ Frequency for dual detector part number G=10,525 GHz and H=10,588 GHz.

Blue Line

ISM-BLP1



ISM-BLP1-P



	ISM-BLP1	ISM-BLP1-P
Mounting Type	Wall	Wall
Detection Technology	PIR	PIR
Description	PIR	Pet Friendly PIR
Passive Infrared (PIR) Sensor	Single Dual Element Sensors	Single Dual Element Sensors
Microwave Doppler Radar	—	—
Environmental Conditions	Standard	Standard
Security/Risk Level	Low	Low
Small Animal Immunity, Pet Friendly	—	14 kg (30 lb.)
Operating Temperature †	-30° to +49° C (-22° to +120°F)	-30° to +49° C (-22° to +120°F)
Optics	Two Fresnel Lenses , 77 zones	
Coverage/Range	11m x 11m (35 ft. x 35 ft.)	11m x 11m (35 ft. x 35 ft.)
Mounting Height	2.3 to 2.7m (7.5 to 9 ft.)	2.3 to 2.7m (7.5 to 9 ft.)
No Adjust Mounting Height	•	•
User-selectable Look Down Zone	•	•
Enclosure Design	Two-piece, Screwless	Two-piece, Screwless
Mounting Bracket Options	B328, B335, B338*	B328, B335, B338*
Sensitivity Level Adjustment	—	—
Alarm Memory	—	—
Anti-mask Detection	—	—
Cover Tamper	•	•
Draft/Insect Immunity	•	•
LED Disable	•	•
Remote Self Test	—	—
Remote Walk Test	—	—
Temperature Compensation	•	•
Trouble Output	•	•
Wall Tamper	•	•
Regulatory Approvals	AFNOR, C-Tick, CCC, CE, cULus, Czech, EN50131-2-2 Grade 2, INCERT, IMQ, RUS, SWE, UKR	
Alarm Output	NC Solid State Relay	NC Solid State Relay
Operating Voltage	10 to 14 VDC	10 to 14 VDC
Current Draw (min/max) – mA	10/18	10/18
Signal Processing	First Step Processing	First Step Processing
Additional Features	Accessory modules	Accessory modules
Options	Camera Module (ISM-BLA1-CC) Night Light Module (ISM-BLA1-LM) Sounder Module (ISM-BLA1-SM)	

Blue Line

ISM-BLQ1



ISM-BLD1-P-F1



ISM-BLD1-F1



‡ #

	ISM-BLQ1	ISM-BLD1-P-F1	ISM-BLD1-F1
Mounting Type	Wall	Wall	Wall
Detection Technology	PIR	PIR/Microwave	PIR/Microwave
Description	Quad PIR	Pet Friendly TriTech®	TriTech®
Passive Infrared (PIR) Sensor	Single Quad Element Sensor	Single Dual Element Sensor	Single Dual Element Sensor
Microwave Doppler Radar	—	Microwave Adaptive Processing	Microwave Adaptive Processing
Environmental Conditions	Moderate	Moderate	Moderate
Security/Risk Level	Low	Medium	Medium
Small Animal Immunity, Pet Friendly	—	45 kg (100 lb.)	45 kg (100 lb.)
Operating Temperature †	-30° to +49° C (-22° to +120°F)	-30° to +49° C (-22° to +120°F)	-30° to +49° C (-22° to +120°F)
Optics	Two Fresnel Lenses , 77 zones	Two Fresnel Lenses , 77 zones	Two Fresnel Lenses , 77 zones
Coverage/Range	11m x 11m (35 ft. x 35 ft.)	11m x 11m (35 ft. x 35 ft.)	11m x 11m (35 ft. x 35 ft.)
Mounting Height	2.3 to 2.7m (7.5 to 9 ft.)	2.3 to 2.7m (7.5 to 9 ft.)	2.3 to 2.7m (7.5 to 9 ft.)
No Adjust Mounting Height	•	•	•
User-selectable Look Down Zone	•	•	•
Enclosure Design	Two-piece, Screwless	Two-piece, Screwless	Two-piece, Screwless
Mounting Bracket Options	B328, B335, B338*	B328, B335, B338*	B328, B335, B338*
Sensitivity Level Adjustment	—	•	•
Alarm Memory	—	—	—
Anti-mask Detection	—	—	—
Cover Tamper	•	•	•
Draft/Insect Immunity	•	•	•
LED Disable	•	•	•
Remote Self Test	—	—	—
Remote Walk Test	—	—	—
Temperature Compensation	•	•	•
Trouble Output	•	•	•
Wall Tamper	•	•	•
Regulatory Approvals	AFMPR, C-Tick, CE, cULus, Czech, EN50131-2-2 Grade 2, INCERT, POL, RUS, SWE, UKR	AFNOR, BZL, C-Tick, CCC, CE, cULus, Czech, EN50131-2-4 Grade 2, FCC, IC, IMQ, INCERT, POL, RUS, SWE, UKR	AFNOR, BZL, C-Tick, CE, EN50131-2-4 Grade 2, INCERT, RUS
Alarm Output	NC Solid State Relay	NC Solid State Relay	NC Solid State Relay
Operating Voltage	10 to 14 VDC	10 to 14 VDC	10 to 14 VDC
Current Draw (min/max) - mA	10/18	15/22	15/22
Signal Processing	First Step Processing	First Step Processing, Microwave Adaptive Processing	First Step Processing, Microwave Adaptive Processing
Additional Features	Accessory modules	Accessory modules	Accessory modules
Options		Camera Module (ISM-BLA1-CC) Night Light Module (ISM-BLA1-LM) Sounder Module (ISM-BLA1-SM)	

ISM-BLA1-CC

Blue Line
Plug-in Modules

Description	Color Camera
Operating Temperature †	-10° to +49° C (+14° to +120°F)
Optics	Pin Hole, 330 Lines, <3 lx
Coverage/Range	66° Horizontal, 53° Vertical
Enclosure Design	Two-piece
Mounting Bracket Options	B328, B335, B338* (together with detector)
Cover Tamper	•
Regulatory Approvals	UL, CE
Alarm Output	NO/NC Solid State Relay
Operating Voltage	10 to 14 VDC
Current Draw	5 mA standby / 115 mA camera on

ISM-BLA1-LM



ISM-BLA1-SM



Description	Night Light (LED)	Sounder
	Optics: 4 White LEDs	Sound Level: 85 dB at 1m
Operating Temperature †	-10° to +49° C (+14° to +120°F)	-10° to +49° C (+14° to +120°F)
Enclosure Design	Two-piece	Two-piece
Mounting Bracket Options	B328, B335 (with detector)	B328, B335 (with detector)
Cover Tamper	not required	not required
Timer	30 sec/4 min	—
Trigger	By detector digital alarm	By panel
On/Off Switch	•	•
Brightness Settings	Low, High	—
Regulatory Approvals	CE	CE
Alarm Output	—	—
Operating Voltage	12 VDC	12 VDC nominal
Current Draw	40 mA with light on low 75 mA with light on high	40 mA max.

* B338 bracket offers an optional tamper feature.

† For UL Listed installations, the required temperature range is 0°C to +50°C (+32°F to +120°F).

‡ Same as BLD1-P, but without Pet/Small Animal Immunity. (Note: not available in the Americas.)

§ Frequency for dual detector part number G=10,525 GHz and H=10,588 GHz.

Microwave frequency of standard TriTech unit F1=10,525 GHz; F2=10,588 GHz; and F4=10,687 GHz.

Classic Line

DS820i



DS835i



	Mounting Type	Wall	Wall
	Detection Technology	PIR/Microwave	PIR/Microwave
	Description	Pet Friendly® TriTech®	Pet Friendly® TriTech®
Application	Passive Infrared (PIR) Sensor	Single Dual Element Sensor	Single Dual Element Sensor
	Microwave Doppler Radar	Microwave Adaptive Processing	Microwave Adaptive Processing
	Environmental Conditions	Moderate	Moderate
	Security/Risk Level	Medium	Medium
	Small Animal Immunity, Pet Friendly	45 kg (100 lb.)	45 kg (100 lb.)
	Operating Temperature †	-40° to +49° C (-40° to +120°F)	-40° to +49° C (-40° to +120°F)
Installation	Optics	Eight-layer Dual Fresnel Lens	Eight-layer Dual Fresnel Lens
	Coverage/Range	6m x 6m (20 ft. x 20 ft.)	11m x 11m (35 ft. x 35 ft.)
	Mounting Height	2.3 to 2.7m (7.5 to 9 ft.)	2.3 to 2.7m (7.5 to 9 ft.)
	No Adjust Mounting Height	—	—
	User-selectable Look Down Zone	•	•
	Enclosure Design	Two-piece, Screwless	Two-piece, Screwless
	Mounting Bracket Options	B328, B335, B338*	B328, B335, B338*
	Sensitivity Level Adjustment	•	•
	Alarm Memory	—	—
	Anti-mask Detection	—	—
Features	Cover Tamper	DS820iT	DS835iT
	Draft/Insect Immunity	•	•
	LED Disable	•	•
	Remote Self Test	—	—
	Remote Walk Test	—	—
	Temperature Compensation	•	•
	Trouble Output	—	—
	Wall Tamper	—	—
	Regulatory Approvals	AFNOR, BZL, CCC, CE, FCC, iDA, INCERT, UL	AFNOR, BZL, CCC, CE, FCC, IC, iDA, INCERT, UL
	Electrical	Alarm Output	NC Relay
Operating Voltage		6 to 15 VDC	6 to 15 VDC
Current Draw (min/max) – mA		16/35	16/35
Signal Processing		First Step Processing	First Step Processing
	Additional Features		
	Options		



Classic Line

DS860



§ †

DS950



§ †

DS970



§ †

	DS860	DS950	DS970
Mounting Type	Wall	Wall	Wall
Detection Technology	PIR/Microwave	PIR/Microwave	PIR/Microwave
Description	TriTech®	Extended TriTech®	Extended TriTech®
Passive Infrared (PIR) Sensor	Single Dual Element Sensor	Single Dual Element Sensor	Single Dual Element Sensor
Microwave Doppler Radar	Microwave Adaptive Processing	Microwave Adaptive Processing	Microwave Adaptive Processing
Environmental Conditions	Moderate	Moderate	Moderate
Security/Risk Level	Medium	Medium	Medium
Small Animal Immunity, Pet Friendly	–	–	–
Operating Temperature †	-40° to +49° C (-40° to +120°F)	-40° to +49° C (-40° to +120°F)	-40° to +49° C (-40° to +120°F)
Optics	Five-layer Dual Fresnel Lens	Five-layer Dual Fresnel Lens	Five-layer Dual Fresnel Lens
Coverage/Range	18m x 18m (60 ft. x 60 ft.)	15m x 15m (50 ft. x 50 ft.)	21m x 21m (70 ft. x 70 ft.)
Mounting Height	1.8 to 2.4m (6 to 8 ft.)	1.8 to 2.4m (6 to 8 ft.)	1.8 to 2.4m (6 to 8 ft.)
No Adjust Mounting Height	–	–	–
User-selectable Look Down Zone	•	•	•
Enclosure Design	Two-piece, Screwless	Two-piece, Screwless	Two-piece, Screwless
Mounting Bracket Options	B328, B335, B338*	B328, B335, B338*	B328, B335, B338*
Sensitivity Level Adjustment	•	•	•
Alarm Memory	–	•	•
Anti-mask Detection	–	Microwave Only	Microwave Only
Cover Tamper	•	•	•
Draft/Insect Immunity	•	•	•
LED Disable	•	•	•
Remote Self Test	–	–	–
Remote Walk Test	–	–	–
Temperature Compensation	–	–	–
Trouble Output	–	•	•
Wall Tamper	–	–	–
Regulatory Approvals	AFNOR, BZL, CCC, CE, cULus , FCC, IC, iDA, IMQ, INCERT, UL	AFNOR, BZL, CCC, CE, cULus , FCC, IC, iDA, IMQ, INCERT, UL	AFNOR, BZL, CCC, CE, cULus , FCC, IC, iDA, IMQ, INCERT, UL
Alarm Output	NC Relay	NC/NO Form C Relay	NC/NO Form C Relay
Operating Voltage	9 to 15 VDC	9 to 15 VDC	9 to 15 VDC
Current Draw (min/max) – mA	16	22	22
Signal Processing	First Step Processing	First Step Processing	First Step Processing
Additional Features	Field Replaceable Fresnel Optics	Field Replaceable Fresnel Optics Motion Monitor PIR and Microwave Supervision Microwave Inhibit	Field Replaceable Fresnel Optics Motion Monitor PIR and Microwave Supervision Microwave Inhibit
Options	OLR92-3 Long Range Lens	OLR92-3 Long Range Lens	OLR92-3 Long Range Lens

* B338 bracket offers an optional tamper feature.

† For UL Listed installations, the required temperature range is 0°C to +50°C (+32°F to +120°F) except for OD850.

‡ Limited availability and/or not available in the Europe, Middle East or Asia.

§ Standard microwave frequency = 10,525 GHz; A = 10,687 GHz; B = 9,9 GHz.

Classic Line

DS915



‡

DS934



‡

DS935Z



‡

	DS915	DS934	DS935Z
Mounting Type	Wall/Flush	Wall	Wall
Detection Technology	PIR	PIR	PIR
Description	Flush-mount PIR	Standard PIR	Extended PIR
Passive Infrared (PIR) Sensor	Single Dual Element Sensor	Single Dual Element Sensor	Single Dual Element Sensor
Microwave Doppler Radar	—	—	—
Environmental Conditions	Standard	Moderate	Moderate
Security/Risk Level	Low	Medium	Medium
Small Animal Immunity, Pet Friendly	—	—	—
Operating Temperature †	-40° to +49° C (-40° to +120°F)	-40° to +49° C (-40° to +120°F)	-40° to +49° C (-40° to +120°F)
Optics	Fresnel Lens	Vertically Adjustable Mirror	Vertically Adjustable Mirror
Coverage/Range	10m x 12m (20 ft. x 38 ft.)	11m x 11m (35 ft. x 35 ft.)	11m x 11m (35 ft. x 35 ft.)
Mounting Height	2 to 2.6m (6.5 to 8.5 ft.)	2 to 3m (6 to 10 ft.)	2 to 3m (6 to 10 ft.)
No Adjust Mounting Height	—	—	—
User-selectable Look Down Zone	—	—	—
Enclosure Design	Flush Mount	Two-piece, Screwless	Two-piece, Screwless
Mounting Bracket Options	—	B328, B335, B338*	B328, B335, B338*
Sensitivity Level Adjustment	•	•	•
Alarm Memory	—	—	—
Anti-mask Detection	—	—	—
Cover Tamper	—	•	•
Draft/Insect Immunity	—	—	—
LED Disable	•	•	•
Remote Self Test	—	—	—
Remote Walk Test	—	—	—
Temperature Compensation	—	—	—
Trouble Output	—	—	•
Wall Tamper	—	—	—
Regulatory Approvals	UL	CE, UL	CE, UL
Alarm Output	NC Relay	NC Relay	NC Relay
Operating Voltage	10 to 15 VDC	9 to 15 VDC	9 to 15 VDC
Current Draw (min/max) – mA	20	20	20
Signal Processing	Alternate Polarity Selectable Pulse Count	Motion Analyzer II	Motion Analyzer II
Additional Features	Field Replaceable Fresnel Optics	Field Replaceable Mirror Optics Spare Terminal	Field Replaceable Mirror Optics 3 Spare Terminals
Options	OLB91-3 Barrier Lens OLC91-3 Dual Corridor Lens OLP91-3 Pet Lens OLR91-3 Long Range Lens OLW91-3 Dense Wide Angle Lens	OMB93-3 Barrier Mirror OMLR93-3 Long Range Mirror OMP93-3 Pet Mirror	OMB93-3 Barrier Mirror OMLR93-3 Long Range Mirror OMP93-3 Pet Mirror

Classic Line

DS306E



DS307



DS308EA



	DS306E	DS307	DS308EA
Mounting Type	Wall	Wall	Wall
Detection Technology	PIR	PIR	PIR
Description	Standard PIR	Extended PIR	Quad PIR with Anti-mask
Passive Infrared (PIR) Sensor	Single Dual Element Sensor	Single Dual Element Sensor	Single Quad Element Sensor
Microwave Doppler Radar	—	—	—
Environmental Conditions	Moderate	Moderate	Moderate
Security/Risk Level	Medium	Medium	Medium
Small Animal Immunity, Pet Friendly	—	—	—
Operating Temperature †	-40° to +49° C (-40° to +120°F)	-40° to +49° C (-40° to +120°F)	-29° to +49° C (-20° to +120°F)
Optics	Vertically and Horizontally Adjustable Mirror	Vertically and Horizontally Adjustable Mirror	Vertically and Horizontally Adjustable Mirror
Coverage/Range	15m x 15m (50 ft. x 50 ft.)	15m x 15m (50 ft. x 50 ft.)	15m x 15m (50 ft. x 50 ft.)
Mounting Height	2 to 2.6m (6.5 to 8.5 ft.)	2 to 2.6m (6.5 to 8.5 ft.)	2 to 2.6m (6.5 to 8.5 ft.)
No Adjust Mounting Height	—	—	—
User-selectable Look Down Zone	—	—	—
Enclosure Design	Two-piece, Screwless	Two-piece, Screwless	Two-piece, Screwless
Mounting Bracket Options	B328, B335, B338*	B328, B335, B338*	B328, B335, B338*
Sensitivity Level Adjustment	•	•	•
Alarm Memory	—	—	—
Anti-mask Detection	—	—	Active IR with Spray Detect
Cover Tamper	•	•	•
Draft/Insect Immunity	—	—	—
LED Disable	•	•	•
Remote Self Test	—	—	—
Remote Walk Test	—	—	—
Temperature Compensation	—	—	—
Trouble Output	—	•	•
Wall Tamper	—	—	(wall tamper kit available)
Regulatory Approvals	AFNOR, CE, UL	CE, UL	AFNOR, CCC, CE, IMQ, UL
Alarm Output	NC Form A Relay	NC/NO Form C Relay	NC/NO Form C Relay
Operating Voltage	6 to 15 VDC	6 to 15 VDC	6 to 15 VDC
Current Draw (min/max) – mA	15	18	25
Signal Processing	Motion Analyzer II	Motion Analyzer II	Q-MAP
Additional Features	Field Replaceable Mirror Optics 2 Spare Terminals	Field Replaceable Mirror Optics Spare Terminal	Field Replaceable Mirror Optics
Options	OMB77-3 Barrier Mirror OMLR77-3 Long Range Mirror	OMB77-3 Barrier Mirror OMLR77-3 Long Range Mirror	OMB77-3 Barrier Mirror OMLR77-3 Long Range Mirror

* B338 bracket offers an optional tamper feature.

† For UL Listed installations, the required temperature range is 0°C to +50°C (+32°F to +120°F).

‡ Not available in Europe, Middle East or Asia.

Classic Line

DS825T



DS840T



	Mounting Type	Wall	Wall	
	Detection Technology	PIR/Microwave	PIR/Microwave	
	Description	Pet Friendly® TriTech®	Pet Friendly® TriTech®	
Application	Passive Infrared (PIR) Sensor	Single Dual Element Sensor	Single Dual Element Sensor	
	Microwave Doppler Radar	Microwave Adaptive Processing	Microwave Adaptive Processing	
	Environmental Conditions	Moderate	Moderate	
	Security/Risk Level	Medium	Medium	
	Small Animal Immunity, Pet Friendly	45 kg (100 lb.)	45 kg (100 lb.)	
	Operating Temperature †	-40° to +49° C (-40° to +120°F)	-40° to +49° C (-40° to +120°F)	
Installation	Optics	Vertically Adjustable Mirror	Vertically Adjustable Mirror	
	Coverage/Range	7.5m x 7.5m (25 ft. x 25 ft.)	12m x 12m (40 ft. x 40 ft.)	
	Mounting Height	2m (6.5 ft.)	2m (6.5 ft.)	
	No Adjust Mounting Height	—	—	
	User-selectable Look Down Zone	•	•	
	Enclosure Design	Two-piece, Screwless	Two-piece, Screwless	
	Mounting Bracket Options	B328, B335, B338*	B328, B335, B338*	
	Sensitivity Level Adjustment	Microwave Only	Microwave Only	
	Features	Alarm Memory	—	—
		Anti-mask Detection	—	—
Cover Tamper		•	•	
Draft/Insect Immunity		—	—	
LED Disable		•	•	
Remote Self Test		—	—	
Remote Walk Test		—	—	
Temperature Compensation		•	•	
Trouble Output		—	—	
Wall Tamper		—	—	
	Regulatory Approvals	AFNOR, BZL, CE, FCC, INCERT, UL	AFNOR, BZL, CE, FCC, INCERT, UL	
Electrical	Alarm Output	NC Relay	NC Relay	
	Operating Voltage	6 to 15 VDC	6 to 15 VDC	
	Current Draw (min/max) – mA	16	16	
	Signal Processing	First Step Processing	First Step Processing	
	Additional Features			
	Options			

* B338 bracket offers an optional tamper feature.

† For UL Listed installations, the required temperature range is 0°C to +50°C (+32°F to +120°F).

§ Standard microwave frequency= 10.525 GHz; A= 10.687 GHz; B=9.9 GHz.

* Not available in Europe, Middle East or Asia.

Long-range

DS778



DS794Z



DS720i



	Mounting Type	Wall	Wall	Wall
	Detection Technology	PIR	PIR	PIR/Microwave
	Description	Long-range PIR	Long-range PIR	Long-range TriTech® with Anti-mask
Application	Passive Infrared (PIR) Sensor	Single Dual Element Sensor	Single Dual Element Sensor	Single Dual Element Sensor
	Microwave Doppler Radar	—	—	Microwave Adaptive Processing
	Environmental Conditions	Moderate	Moderate	Moderate
	Security/Risk Level	Medium	Medium	Medium
	Small Animal Immunity, Pet Friendly	—	—	—
	Operating Temperature †	-40° to +49° C (-40° to +120°F)	-29° to +49° C (-20° to +120°F)	-29° to +49° C (-20° to +120°F)
Installation	Optics	Vertically and Horizontally Adjustable Mirror	Interchangeable Mirror	Interchangeable Mirror
	Coverage/Range	60m x 4.5m (200 ft. x 15 ft.)	61m x 3m (200 ft. x 10 ft.) 37m x 8m (120 ft. x 25 ft.) 24m x 16m (80 ft. x 50 ft.)	91m x 4.5m (300 ft. x 15 ft.) 37m x 8m (120 ft. x 25 ft.) 27m x 21m (90 ft. x 70 ft.)
	Mounting Height	2 to 2.6m (6.5 to 8.5 ft.)	2.3 to 5m (7.5 to 15 ft.)	2.3 to 5m (7.5 to 15 ft.)
	No Adjust Mounting Height	—	—	—
	User-selectable Look Down Zone	•	—	—
	Enclosure Design	Two-piece, Screwless	Two-piece, Screwless, with Mounting Bracket	Two-piece, Screwless, with Mounting Bracket
	Mounting Bracket Options	B328, B335, B338*	—	—
	Sensitivity Level Adjustment	•	•	•
Features	Alarm Memory	—	—	•
	Anti-mask Detection	—	—	•
	Cover Tamper	•	•	•
	Draft/Insect Immunity	•	—	—
	LED Disable	•	•	•
	Remote Self Test	—	—	—
	Remote Walk Test	—	—	•
	Temperature Compensation	—	—	•
	Trouble Output	—	•	•
	Wall Tamper	—	—	•
	Regulatory Approvals	CE, UL	CE, UL	UL, FCC
Electrical	Alarm Output	NC/NO Form C Relay	NC/NO Form C Relay	NC/NO Form C Relay
	Operating Voltage	6 to 15 VDC	6 to 15 VDC	9 to 15 VDC
	Current Draw (min/max) – mA	18	18/25	32/60
	Signal Processing	Motion Analyzer II	Motion Analyzer II	Motion Analyzer II
	Additional Features		Motion Monitor PIR Supervision	Motion Monitor PIR and Microwave Supervision
	Options		OA120-2 Long Range Mirror OA80-2 Long Range Mirror	OA120-2 Long Range Mirror

Ceiling-mount

DS936



DS938Z



DS9360



	DS936	DS938Z	DS9360
Mounting Type	Ceiling	Ceiling	Ceiling
Detection Technology	PIR	PIR	PIR/Microwave
Description	Low Profile Panoramic PIR	High Performance Panoramic PIR	High Performance Panoramic TriTech®
Application			
Passive Infrared (PIR) Sensor	Single Dual Element Sensor	Single Dual Element Sensor	Single Dual Element Sensor
Microwave Doppler Radar	—	—	Microwave Adaptive Processing
Environmental Conditions	Moderate	Moderate	Moderate
Security/Risk Level	Low	Medium	Medium
Small Animal Immunity, Pet Friendly	—	—	—
Operating Temperature †	-29° to +49° C (-20° to +120°F)	-29° to +49° C (-20° to +120°F)	-29° to +49° C (-20° to +120°F)
Installation			
Optics	Fresnel	Interchangeable Mirror	Interchangeable Mirror
Coverage/Range	7.5m (24 ft.) x 360 degrees	18m (60 ft.) x 360 degrees	18m (60 ft.) x 360 degrees
Mounting Height	2 to 3.6m (7 to 12 ft.)	2.5 to 6m (8 to 18 ft.)	2.5 to 6m (8 to 18 ft.)
No Adjust Mounting Height	—	—	—
User-selectable Look Down Zone	—	—	—
Enclosure Design	Low Profile	Dome	Dome
Mounting Bracket Options	—	—	—
Sensitivity Level Adjustment	•	•	•
Features			
Alarm Memory	—	—	—
Anti-mask Detection	—	—	—
Cover Tamper	•	•	•
Draft/Insect Immunity	•	—	—
LED Disable	•	•	•
Remote Self Test	—	—	—
Remote Walk Test	—	—	—
Temperature Compensation	—	•	•
Trouble Output	•	•	•
Wall Tamper	—	—	—
Regulatory Approvals	CCC, CE, UL	AFNOR, CCC, CE, UL	BZL, CCC, CE, FCC, iDA, UL
Electrical			
Alarm Output	NC Relay	NC/NO Form C Relay	NC/NO Form C Relay
Operating Voltage	10 to 15 VDC	6 to 15 VDC	6 to 15 VDC
Current Draw (min/max) – mA	20	18	18
Signal Processing	Field Selectable Standard, Intermediate or High	Motion Analyzer II	Motion Analyzer II and Microwave Adaptive Processing
Additional Features		Motion Monitor PIR Supervision	
Options			

† For UL Listed installations, the required temperature range is 0°C to +50°C (+32°F to +120°F).

§ Frequency of DS9360 = 10,525 GHz.

* Not available in Europe, Middle East or Asia.

Ceiling-mount

ISN-CC1-50W



ISN-CC1-100N



	ISN-CC1-50W	ISN-CC1-100N
Mounting Type	Ceiling	Ceiling
Detection Technology	PIR	PIR
Description	Low Profile Wide Angle PIR	Low Profile Long-range PIR
Passive Infrared (PIR) Sensor	Single Dual Element Sensor	Single Dual Element Sensor
Microwave Doppler Radar	—	—
Environmental Conditions	Standard	Standard
Security/Risk Level	Low	Low
Small Animal Immunity, Pet Friendly	—	—
Operating Temperature †	-20° to +50° C (-4° to +122°F)	-20° to +50° C (-4° to +122°F)
Optics	30 Degree Vertically Adjustable Mirror	33 Degree Vertically Adjustable Mirror
Coverage/Range	14m x 14m (45 ft. x 45 ft.)	20m x 2.8m (98 ft. x 9 ft.)
Mounting Height	2.5 to 5m (8 to 16 ft.)	2.5 to 5m (8 to 16 ft.)
No Adjust Mounting Height	—	—
User-selectable Look Down Zone	—	—
Enclosure Design	Low Profile	Low Profile
Mounting Bracket Options	—	—
Sensitivity Level Adjustment	•	•
Alarm Memory	—	—
Anti-mask Detection	—	—
Cover Tamper	•	•
Draft/Insect Immunity	—	—
LED Disable	•	•
Remote Self Test	—	—
Remote Walk Test	—	—
Temperature Compensation	•	•
Trouble Output	•	•
Wall Tamper	—	—
Regulatory Approvals	C-Tick, UL	C-Tick, UL
Alarm Output	NC/NO Relay	NC/NO Relay
Operating Voltage	9 to 28 VDC	9 to 28 VDC
Current Draw (min/max) – mA	25	25
Signal Processing	Standard	Standard
Additional Features		
Options		

Ceiling-mount

DS939



DS9370



OD850



	DS939	DS9370	OD850
Mounting Type	Ceiling	Ceiling	Outdoor, Wall
Detection Technology	PIR	PIR/Microwave	PIR/Microwave
Description	High Performance Panoramic PIR	High Performance Panoramic TriTech®	Outdoor TriTech®
Passive Infrared (PIR) Sensor	Three Dual Element Sensors	Three Dual Element Sensors	Single Dual Element Sensor
Microwave Doppler Radar	—	Microwave Adaptive Processing	Linear Travel Distance
Environmental Conditions	Moderate	Harsh	Harsh
Security/Risk Level	Medium	Medium	Medium
Small Animal Immunity, Pet Friendly	—	—	—
Operating Temperature †	-40° to +49° C (-40° to +120°F)	-40° to +49° C (-40° to +120°F)	-40° to +54° C (-40° to +130°F)
Optics	69 zones in 21 barriers (3 groups of 7 barriers from 3 Fresnel Lenses), Vertically and Horizontally Adjustable	69 zones in 21 barriers (3 groups of 7 barriers from 3 Fresnel Lenses), Vertically and Horizontally Adjustable	Fresnel
Coverage/Range	21m (70 ft.) x 360 degrees	21m (70 ft.) x 360 degrees	15m x 15m (50 ft. x 50 ft.)
Mounting Height	2.4 to 7.6m (8 to 25 ft.)	2.4 to 7.6m (8 to 25 ft.)	2.3 to 2.7m (7.5 to 9 ft.)
No Adjust Mounting Height	—	—	—
User-selectable Look Down Zone	—	—	—
Enclosure Design	Two-piece, Hinged, Screwless	Two-piece, Hinged, Screwless	High Impact ABS, Two-piece, Locking, IP54 Rated
Mounting Bracket Options	—	—	B338*
Sensitivity Level Adjustment	•	•	•
Alarm Memory	•	•	—
Anti-mask Detection	—	—	—
Cover Tamper	•	•	•
Draft/Insect Immunity	•	•	•
LED Disable	•	•	•
Remote Self Test	—	—	—
Remote Walk Test	•	•	—
Temperature Compensation	•	•	•
Trouble Output	—	—	—
Wall Tamper	•	•	•
Regulatory Approvals	cULus, CE	cULus, CE, FCC	cULus, C-Tick, CE, FCC, IC, IP54
Alarm Output	NC/NO Form C Solid State Relay	NC/NO Form C Solid State Relay	NC/NO Form C Relay
Operating Voltage	9 to 15 VDC	9 to 15 VDC	10 to 15 VDC
Current Draw (min/max) – mA	22/39	29/39	22/62
Signal Processing	First Step Processing	First Step Processing	Motion Analyzer II and Linear Travel Distance
Additional Features			Adjustable Time Relay Output Day/Night Mode And/Or Alarm Mode
Options		Available in black (DS9371)	

Request-to-Exit

DS150i/DS151i



DS160/DS161



Mounting Height	4m (13 ft.)	4m (13 ft.)
Coverage	2.4m x 3m (8 ft. x 10 ft.)	2.4m x 3m (8 ft. x 10 ft.)
Description	Standard PIR	Standard PIR, Sequential Logic Input
Optics	Fresnel	Fresnel
Alarm Output	2 Relays, NC/NO	2 Relays, NC/NO
Operating Temperature †	-30° to +49° C (-20° to +120°F)	-30° to +49° C (-20° to +120°F)
Cover Tamper	—	•
LED Disable	—	•
Relay Fail Safe/Fail Secure	•	•
Regulatory Approvals	CE, UL	CE, UL
Operating Voltage	12 or 24 VDC or VAC	12 or 30 VDC or VAC
Current Draw (min/max) – mA	26/35	8/39
Additional Features	Relay Settable Select Pattern Masking	Door Monitor with Sounder Keycard Reader Input Relay Settable Select Pattern Masking
Options		Trim Plate (TP160 - gray, TP161-black) Sounder Cover (SC160 - gray, SC161 - black)

* B338 bracket offers an optional tamper feature.

† For UL Listed installations, the required temperature range is 0°C to +50°C (+32°F to +120°F).

§ Microwave frequency of standard OD850 F1=10,525 GHz; F2=10,588 GHz; and DS9370=10,525 GHz.



Glass Break

DS1101i



DS1108i



DS1102i



DS1103i



DS1109i



Coverage	7.6m maximum				3m
Description	Round	Round	Square	Flush Mount	Combo Magnetic Contact
Alarm Output	NC/NO	NC	NC/NO	NC	NC
Operating Temperature †	-29° to +49° C (-20° to +120°F)				
Cover Tamper	•	•	•	—	—
Wall Tamper	•	•	•	—	•
LED Indicator	•	•	•	—	—
Regulatory Approvals	UL, ULC	UL, ULC	UL, ULC	UL, ULC	UL, ULC
Operating Voltage	6 to 15 VDC	9 to 15 VDC	6 to 15 VDC	9 to 15 VDC	6 to 15 VDC
Maximum Current Draw – mA	24	24	24	26	29
Additional Features					
Options	Auto Sound Tester	Auto Sound Tester	Auto Sound Tester	Auto Sound Tester	Auto Sound Tester

Seismic

ISN-SM-50



ISN-SM-80



Coverage	50m²	80m²
Description	Steel, Concrete	Steel, Concrete, LWS
Alarm Output	NC Solid State Relays	NC Solid State Relays
Operating Temperature †	-40° to +70° C (-40° to +158°F)	-40° to +70° C (-40° to +158°F)
Sensitivity Level Adjustment	•	•
Cover Tamper	•	•
Wall Tamper	•	•
Voltage Monitoring	•	•
Regulatory Approvals	CE, VDS, UL, IMQ, Skafor, Nfa2P, ANPI	CE, UL, IMQ, Nfa2P, ANPI
Operating Voltage	8 to 16 VDC	8 to 16 VDC
Maximum Current Draw – mA	6	6
Additional Features	Thermal Mechanical, Explosive, Water Attack Detection Mounting and Function Test	Thermal Mechanical, Explosive, Water Attack Detection Detection Mounting and Function Test Local Event Memory
Options	Anti-Drill Foil (ISN-GMX-D7) Fixing Device (ISN-GMA-S6) Floor Box (ISN-GMX-B0) Mounting Plate (ISN-GMX-P0) Swivel Plate (ISN-GMX-P3S) Test Transmitter (ISN-GMX-S1) Wall Recess Set (ISN-GMX-W0) Watertight Housing (ISN-GMXW-G0) 2mm Spacer (ISN-GMX-P3S2) 4mm Spacer (ISN-GMX-P3S4) SensTool PC Software (ISN-SMS-W7)	Anti-Drill Foil (ISN-GMX-D7) Fixing Device (ISN-GMA-S6) Floor Box (ISN-GMX-B0) Mounting Plate (ISN-GMX-P0) Swivel Plate (ISN-GMX-PZ) Test Transmitter (ISN-GMX-S1) Wall Recess Set (ISN-GMX-W0) Watertight Housing (ISN-GMXW-G0) 2mm Spacer (ISN-GMX-P3S2) 4mm Spacer (ISN-GMX-P3S4) SensTool PC Software (ISN-SMS-W7)

Photo Beams



Range	150m (500 ft.)	150m (500 ft.)	150m (500 ft.)	30m (100 ft.)
Description	Indoor, Single Beam	Indoor, Single Beam	Indoor, Single Beam	Indoor, Single Beam
Detection Method	Pulsed Active IR	Pulsed Active IR	Pulsed Active IR	Pulsed Active IR
Alarm Output	NO/NC	NO/NC	NO/NC	NO/NC
Operating Temperature †	-18° to +49° C (0° to +120°F)			
Cover Tamper	•	•	•	•
Draft/Insect Immunity	•	•	•	•
Alarm Memory	–	–	•	–
Regulatory Approvals	UL	UL	UL	UL
Operating Voltage	12 or 24 VDC or VAC	12 or 24 VDC or VAC	12 or 30 VDC or VAC	12 or 30 VDC or VAC
Current Draw – mA	41	41	28	25
Additional Features	4-hour Battery Backup, Alarm Retransmission	Alarm Retransmission	Alarm Retransmission Inhibit Wiring	
Options	TR12 Transformer	TR12 Transformer		

Photo Beams



Range (Indoor)	90m (300 ft.)	180m (600 ft.)	220m (720 ft.)	240m (800 ft.)	240m (800 ft.)	300m (1000 ft.)
Range (Outdoor)	30m (100 ft.)	60m (200 ft.)	110m (360 ft.)	160m (530 ft.)	120m (400 ft.)	200m (660 ft.)
Description	Outdoor Dual, IP54 Rated		Outdoor Quad, IP54 Rated			
Detection Method	Pulsed Active IR					
Alarm Output	NO/NC	NO/NC	NO/NC	NO/NC	NO/NC	NO/NC
Operating Temperature †	-25° to +55° C (-13° to +131°F)		-25° to +60° C (-13° to +140°F)		-25° to +55° C (-13° to +131°F)	
Cover Tamper	•	•	•	•	•	•
Draft/Insect Immunity	•	•	•	•	•	•
Regulatory Approvals	UL	UL	UL, CE	UL, CE	UL, CE	UL, CE
Operating Voltage	12 to 28 VDC	12 to 28 VDC	10.5 to 28 VDC			
Current Draw (min/max) – mA	25/40	30/55	135	160	115	135
Additional Features	Environmental Discrimination		Environmental Discrimination, 100 Times Sensitivity Allowance, Selectable Beam Control, Selectable Beam Interruption Time Control		Environmental Discrimination, 100 Times Sensitivity Allowance, Selectable Beam Control, Selectable Beams, Selectable and/or Gate, Selectable Beam Interruption Time Control	
Options						

† For UL Listed installations, the required temperature range is 0°C to +50°C (+32°F to +120°F).

New Sensor Naming Convention

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Type	Component	Prefix		Identifier						Specifier						
				Series	Detector Type		Gen									
PIR	PIR	I	S	C	-	A	P	R	1	-	W	x				
	Duplex	I	S	C	-	B	P	D	2	-	W	x				
	Quad	I	S	C	-	B	P	Q	3	-	W	x				
	Dual (TriTech)	I	S	P	-	P	D	L	1	-	W	x	x			
Contacts	Door/Window	I	S	C	-	A	M	C	1	-	F	x				
	Mini-Door/Window	I	S	C	-	A	M	C	1	-	M	x				
	Recessed	I	S	C	-	A	M	C	1	-	R	x				
Glass Break	Shock	I	S	C	-	P	G	B	2	-	S	x	x			
	Audio	I	S	C	-	P	G	B	3	-	C	x	x			

Professional Series Examples:

PPR1	I	S	C	-	P	P	R	1	-	W	1	6				
PDL1	I	S	C	-	P	D	L	1	-	W	1	8	G			
PDL1	I	S	C	-	P	D	L	1	-	W	1	8	H			

Prefix:

Characters 1 and 2 are fixed.
Character 3 specifies the connectivity of the product.

Identifier:

Character 5 specifies the series.
Characters 6 and 7 specify the type of detector.
Character 8 specifies the generation.

Specifier:

Character 10 specifies the mounting type.
1, 2 or 3 characters specify sensors and contacts and any special characteristics or features.
The characteristics or features should be listed in order of appearance (from top to bottom) to be consistent.
The last character specifies the operational frequency range. It will always be at the end of a dual or ranging.
If it is a wireless detector, the last character will be X, Y or Z.



Connectivity	
W	wLSN
P	Point Bus Connectivity (LSN)
C	Conventional Connectivity
Z	Reserved for future technology

Series	
A	Residential
B	Small Commercial
P	Professional

Detector Type	
DL	Dual – PIR and Microwave
DT	Diagnostic Tool
GB	Glass Break
HB	Hub
HO	Hold Up Detector
HT	Heat
IN	Inertia
KF	Keyfob
KP	Keypad
MC	Magnetic Contact
N1	WSN Generation 1
PB	Photoelectric Beam
PR	PIR – Passive Infrared
RL	Relay
PD	PIR Duplex
PQ	PIR Quad
PM	Ranging Microwave
RX	Request to exit
SM	Smoke
SR	Siren
AC	Accessory

Generation	
Alpha = Different OEM or Private Label Numeric = Variant or design change	
1	1st version of Bosch branded product
A	1st version of private label

Mounting Type	
C	Ceiling Mount
F	Flush Mount
M	Mini
R	Recessed
S	Surface Mount
W	Wall Mount

Technologies	
O	Outdoor
A	Anti-mask
P	Pet-immune
C	Curtain (Barrier) Coverage Pattern
N	Narrow Focus
W	Wide Focus
F	Fixed Temperature
R	Rate of Rise
B(n)	Number of Buttons on Keyfob
#	Sensors = Product range (m)
	Contacts = Diameter or Length size (mm)

Frequency (PIR with Microwave)		
G	10.525 GHz	F1
H	10.588 GHz	F2
I	9.900 GHz	F3
J	10.687 GHz	F4
K	9.350 GHz	F5

Frequency (Wireless System Only)	
X	868-870 MHz
Y	902-928 MHz
Z	Country Code

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 armed, the Alarm Memory remembers if an alarm event occurred. When the system is disarmed 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%.
First Step Processing (FSP)	Allows virtually instant response to human targets 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.

Feature Index

Feature	Description
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.

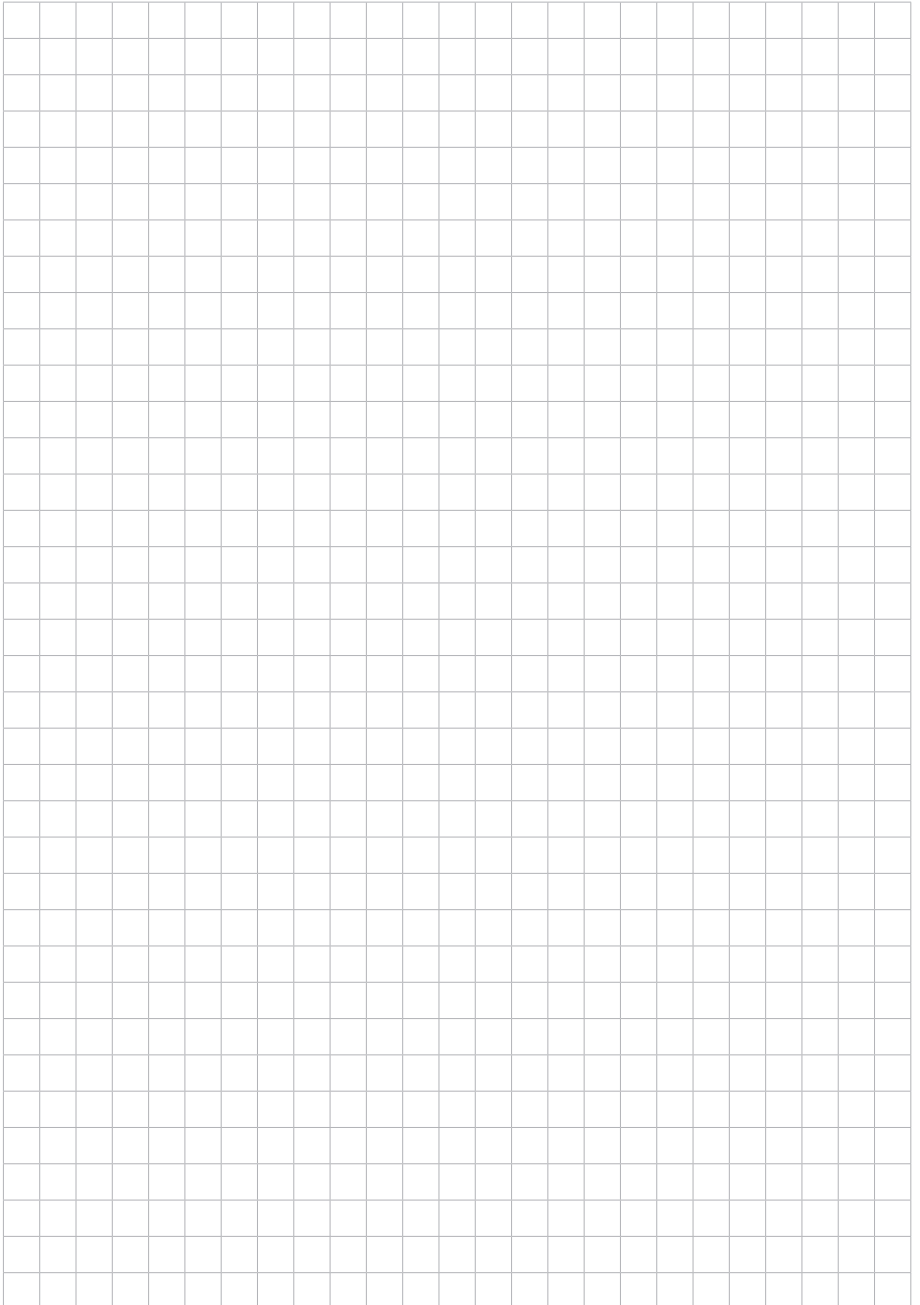
Feature Index

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 large grid of graph paper for taking notes, consisting of 30 columns and 30 rows of small squares. The grid is empty and occupies the majority of the page below the 'Notes' header.



Bosch Security Systems

To learn more about our product offering,
please visit www.boschsecurity.com
or send an e-mail to
emea.securitysystems@bosch.com

© Bosch Security Systems, Inc., 2007
Modifications reserved
Printed in Germany | 03/08 | HOL
AS-FP-en-55_F01U517504_02