## PEDESTRIAN SENSING SOLUTIONS

PEDESTRIAN SENSING SOLUTIONS





INDUSTRIAL AUTOMATION SOLUTIONS



VEHICLE SENSING SOLUTIONS



PEOPLE COUNTING SOLUTIONS



A HALMA COMPANY



## **Opening sensors for pedestrian doors**

Opening sensors require a movement in the detection field to trigger the opening. These sensors work perfectly inside, outside and even in critical environments (rain, snow, fog, freezing temperatures etc...).

### Sensor series

	EAGLE 1/1HM	The premium opening solution for all types of automatic doors.	2
	EAGLE5+/6+	The reference for all types of automatic doors.	3
0	MICROHEAD	The smallest microwave opening sensor for all automatic doors.	4
	ZEN	Radar sensor for automatic sliding doors.	5
<b>e</b>	MW8	The economical sensor for automatic doors.	6
9	MAGIC SWITCH	The contactless intentional sensor for automatic doors.	7
	MINI FLY	Compact and flexible passive infrared motion sensor for revolving doors.	8
1	FLY	Passive infrared motion sensor for revolving doors.	9
	434MHz Wireless push plate	Manual wireless push plate for automatic doors.	10
Lease 10 cms	Push plate	Manual push plate for automatic doors.	11
	Remote controls	Handy, practical and efficient solution to open doors, gates,etc.	12

# EAGLE 1/1HM





EAGLE 1/1HM is the energy saving universal opening sensor that works perfectly on all kinds of automatic doors, especially on swing doors.

### Features

- Universal opening solution that can be easily installed on all kinds of automatic entrances.
- Appealing design for swing doors thanks to positioning the sensor above the pivot.
- High level of stability and reliability of the detection area thanks to the planar antenna developed by BEA.
- Improvement of the energy efficiency of buildings thanks to the unidirectional radar, which detects approaching movements and filters out movements moving away: the door closes earlier and reduces heat loss.
- EAGLE 1 HM is available for big doors (Max Mounting height: 5 m).

### Installation

- Adjustment of the detection field size with push buttons.
- Fine tuning with the universal BEA coded infrared remote control.

### Application

- Activation of linear, telescopic, curved sliding, swing, revolving and folding doors, etc.
- \* Use photobeam infrared sensor for safety of automatic doors.

### Technical specifications

	Technology	Microwave, 24.150 GHz
	Detection mode	Motion
	Tilt angles	$0^\circ$ to $90^\circ$ vertical / -30° to 30° lateral
	Detection area	4 m (W) × 2 m (D) (wide)
		2 m (W) × 2.5 m (D) (narrow)
	Supply voltage	12 V to 24 V AC ±10%
		12 V to 24 V DC -10% /+30%
	Power consumption	< 2 W
	Dimensions	120 mm (W) × 80 mm (H) × 50 mm (D)
	Temperature range	-20°C to + 55°C
	Degree of protection	IP54
	Mounting height	Up to 4 m (EAGLE 1 HM max.5m)



Sliding door applications



Swing door applications

### Accessories

ORA	ERA	EBA
	Ħ	
ECA	6 elements antenna	Remote control

## EAGLE 5+/6+





EAGLE 5+/6+ is the solution for all types of automatic doors and it works in all different kinds of environments.

### Features

- High level of stability and reliability of the detection area thanks to the planar antenna developed by BEA.
- The EAGLE 5+ improves energy performances of buildings via unidirectional radar.
- Wide detection area gives user comfort and good detection of approaching lateral movements.

### Installation

- Adjustment of the radar detection field and immunity via potentiometer.
- This radar sensor has 4 DIP-switches for key settings adjustment.
- Vertical adjustment of the antenna: from 0° to 90°. This means that you can fix your EAGLE to the ceiling, without the need of additional accessories.
- Lateral adjustment of the antenna: from -30° to +30°.

### Application

- Activation of linear, telescopic, curved sliding, swing, revolving and folding doors, etc.
- \* Use photobeam infrared sensor for safety of automatic doors.

### Technical specifications

Technology	Microwave, 24.150 GHz	
Detection mode	Motion	
Tilt angles	0° to 90° vertical / -30° to 30° lateral	
Detection area	4 m (W) × 2 m (D) (wide)	
	2 m (W) × 2.5 m (D) (narrow)	
Supply voltage	12 V to 24 V AC ±10%	
	12 V to 24 V DC -10% /+30%	
Power consumption	< 2 W	
Dimensions	120 mm (W) × 80 mm (H) × 50 mm (D)	
Temperature range	-20°C to +55°C	
Degree of protection	IP54	
Mounting height	Up to 4 m	



EAGLE 5+: Unidirectional sensor



EAGLE 6+: Bidirectional sensor



### 3

## MICROHEAD





**MICROHEAD** is the smallest microwave opening sensor for automatic doors.

### Features

- The MICROHEAD exists in unidirectional and bidirectional versions.
- Manual adjustment of the detection field by potentiometer.
- The sensor especially adapts to compact door controllers.
- Optimized design with a miniature and translucent housing.

### Installation

 Vertical adjustment of antenna from 0 to 90° and lateral adjustment from -30° to +30°.

### Application

- Activation of linear, telescopic, curved sliding, swing, revolving and folding doors, etc.
- \* Use photobeam infrared sensor for safety of automatic door.



Sliding door applications



Folding door applications

### Technical specifications

Technology	Microwave, 24.150 GHz
Detection mode	Motion
Tilt angles	0° to 90° vertical / -30° to 30° lateral
Detection area	4 m (W) × 2 m (D) (wide)
	2 m (W) × 2.5 m (D) (narrow)
Supply voltage	12 V to 24 V DC -10% /+30%
Power consumption	< 2 W
Dimensions	80 mm (W) x 60 mm (H) x 55 mm (D)
Temperature range	-20°C to +55°C
Degree of protection	IP54
Mounting height	1.8 m to 3 m

### Accessories



6 elements antenna







ZEN is a simple and elegant radar sensor for automatic sliding doors.

### Features

- Bidirectional sensor offering a reliable and comfortable opening.
- Adjustable radar angle (vertical).
- Easy to open.
- Plug and Play.

### Installation

- Front cover is easy to open by hand.
- Possibility to adjust the radar antenna angle (vertical) .
- Possibility to adjust the opening area via potentiometer.
- Possibility to adjust the radar immunity via DIP-switch.

### Application

- Opening sensor for automatic sliding doors.
- \* Use photobeam infrared sensor for safety of automatic doors.

### Technical specifications

Technology	Microwave, 24.150 GHz
Detection mode	Motion
Min. detection speed	5 cm/s (measured in the sensor axis)
Supply voltage	12 V to 24 V AC ±10% 12 V to 30 V DC
Power consumption	< 2 W
Mains frequency	50 to 60 Hz
Temperature range	-20°C to +55°C
Degree of protection	IP54
Mounting height	Up to 4 m



This product has no accessories.



Sliding door applications



Sliding door applications

## **MW8**



MW8 is a cost-effective radar sensor for automatic doors.

### Features

- Plug and play.
- Bidirectional detection offering reliable opening.
- Economic activation sensor for compact door controllers.

### Installation

- Adjustment of the radar detection field via potentiometer.
- Possibility to adjust the radar antenna angle (vertical).
- Application
- Opening sensor for automatic sliding doors.
- \* Use photobeam infrared sensor for safety of automatic doors.



### Sliding door applications



Sliding door applications

### Technical specifications

Technology	Microwave, 24.150 GHz
Detection mode	Motion
Tilt angles	15° to 45°
Detection area	4 m (W) x 2 m (D) (Max.)
	(Mounting height = 2.2 m)
Supply voltage	12 V to 24 V AC ±10%
	12 V to 30 V DC
Power consumption	< 2 W
Dimensions	142 mm (W) x 46 mm (H) x 45 mm (D)
Temperature range	-20°C to +55°C
Degree of protection	IP52
Mounting height	Up to 4 m





MBA

# MAGIC SWITCH





MAGIC SWITCH is a contactless proximity radar sensor for automatic doors.

### Features

- Possibility of keeping the door open with the toggle mode.
- Easy opening solution for automatic doors used by disable people.
- Concealed installation and homogeneous detection thanks to the radar technology.
- Detection area adjustable between 10 cm and 50 cm.

### Installation

- Different installation options.
- Switch or pulse mode with DIP-switches.
- Adjustment of detection area with potentiometer.

### Application

- Low energy doors for people with disabilities.
- Retail, clean rooms, operating theatres, logistics, hotels and restaurants.



Activation for sliding doors



Activation for swing doors

### Technical specifications

Technology	Microwave, 24.150 GHz
Detection mode	Motion
Mains frequency	50 - 60Hz
Detection area	±10 to 50 cm if movement towards sensor at 90°(adjustable)
Supply voltage	12 V to 24 V AC ±10% 12 V to 24 V DC -10%/+30%
Power consumption	< 1.2 W
Output hold time	0.5 s (in PULSE mode)
Temperature range	-20°C to +55°C
Degree of protection	IP52
Color	White

### Accessories



### Visible box MAGIC SWITCH IP65







MINI FLY is a compact opening sensor using passive infrared technology.

### Features

- Advanced temperature compensation technology ensures activation even if the environment is close to the temperature of human body.
- -4° to +4° adjustable angle.
- Adjustable output setting.
- Smaller size and installation height up to 3.5 m.
- Excellent immunity performances against interferences.
- Detection area can be adjusted by using the masking lens.
- · Potentiometer to adjust the detection sensitivity.

### Installation

- Installation templates are provided to ease the installation.
- Possibility to have a recessed installation thanks to MFCA accessory.
- Possibility to have a wall and ceiling installation thanks to the MBKT accessory.

### Application

- Can be easily used in revolving doors using MFCA accessory.
- Opening for revolving doors and sliding doors.

### Technical specifications

Technology	Passive infrared	
Detection mode	Motion	
Tilt angles	-4° to +4°	
Detection area	2.5m (W) ×1.5m (D) mounting height of 2.2m	
	4.0m (W) ×2.4m (D) mounting height of 3.5m	
Supply voltage	12 V to 24 V AC ±10%	
	12 V to 24 V DC -10%/+30%	
Power consumption	< 1 W	
Dimensions	64 mm(W)×41 mm(H)×23 mm(D)	
Temperature range	-30°C to +55°C	
Degree of protection	IP54	
Mounting height	Up to 3.5 m	



**Revolving door applications** 



Sliding door applications

### Accessories



MFCA

MBKT







FLY is a passive infrared motion sensor which offers a comfortable and reliable activation field.

### Features

- Insensitive to interferences such as rain and snow.
- Precise and stable optical block ensures a reliable opening detection.
- Detection zone can be adjusted by means of the masking lens.
- Can be completely recessed into any surface except for metallic ones.

### Installation

- Electronic adjustments with DIP-switches.
- Adjustment of the sensing field by shaping of a mask.

### Application

• This sensor is suitable for small pedestrian doors (Max. 3 m).



Revolving door applications



Swing door applications

### Technical specifications

Technology	Passive infrared
Detection mode	Motion
Detection area	2.5 m (W) ×1.5 m (D) (Max.) 0.5 m (W)×0.5 m (D) (Min.) (mounting height of 2.2m)
Supply voltage	12 V to 24 V AC ±10% 12 V to 24 V DC -10% /+30%
Power consumption	< 1 W
Dimensions	101mm(W)×41mm(H)×27mm(D)
Temperature range	-30°C to +55°C
Degree of protection	IP54
Mounting height	Up to 3 m





**FSA** 

FCA

9

# 434MHz Wireless push plate





434MHz Wireless push plate and receiver are practical, efficient and well-designed manual solution to open your automatic door.

### Features

- Elegant design.
- Plug and play.
- Battery life minimum 1 year. (Subject to usage)
- 1 set = 2 wireless push plates +1 receiver.
- 434 MHz wireless is the ideal solution for specific applications where sensors are not suitable.

### Installation

- Multifunction BEA receiver.
- 2 x AAA batteries easy to replace.
- RED LED starts to flash when the battery is low to inform the enduser that it has to be replaced.
- Can be installed on the door or on a wall.



Ideal solution for sliding doors and swing doors.



Wall installation



**Door installation** 

### Technical specifications

Supply voltage	12V - 24V AC ±10%
	12V - 30V DC -5%/+10%
Power consumption	< 3 W
Frequency	434 MHz
Temperature range	-20°C to +55°C
No. of programmed units for each receiver	4 Transmitters
Receiver LEDs	Red: Receiver Learn
	Green: Relay Activation

### Accessories

# Other kinds of push plates



These push plates series provide an opening solution for automatic doors.

### Features

- Robust and aesthetic push plates for the opening of all kinds of automatic doors.
- Choice of attractive shapes (round, square or jamb) that fit into any kind of architecture.
- Really suited to the comfort of disabled people.
- Simple opening by pushing on the plate.
- Wired and wirless versions available.
- Weather ring to ensure watertightness.
- Stainless steel front surface for improved durability.

### Installation

- Easy installation on the wall.
- Invisible when flush mounted.

### Application

Ideal solution for all kinds of automatic doors.



Wall installation



### Accessories

This product has no accessories.

### Technical specifications

	JAMB	SQUARE	ROUND
Dimensions	38x120x16mm	120x120x16mm	152mm Ø x16mm
Series	PBJ	PBS	PBR
Plain face	PBJ-PLAIN	PBS-PLAIN	PBR-PLAIN
Text only	PBJ-TEXT	PBS-TEXT	PBR-TEXT
Symbol only	PBJ-SYMB	PBS-SYMB	PBR-SYMB
Text and symbol	PBJ-TEXT+SYMB	PBS-TEXT+SYMB	PBR-TEXT+SYMB

## Remote control





Remote control is a handy and practical solution to open doors, garage doors, gates, barriers, etc.

### Features

- Robust, industrial environment suitable design.
- Control distance is up to 100 m in open space.
- Operates with a unique rolling code each time the switch is activated.
- Multiple applications (i.e. Vestibule) with delay or no delay programming.
- 100 transmitters can be programmed into a single receiver, A transmitter code can be removed.
- 4 relays can be programmed flexibly.
- 4 transmitter-versions available (1, 2, 3 or 4 buttons).
- Red LED indicator on transmitter confirms transmission and battery life.
- Extended antenna available.

### Installation

The BEA 433MHz receiver can be easily installed on the door /gate operator.

### Application

Ideal solution for doors, garage doors, gates, barriers, etc.

### Technical specifications

Frequency	433 MHz
Emitted Radio Power	≤ 7 dBm (Transmitter)
Current Consumption	32 mA (Transmitter) 40 mA (Receiver)
Contact range	1.0 A @ 30 V DC
Power supply	3 V DC(CR 2032 3V battery*2) 50,000 cycles (Transmitter) 9V to 30 V DC/AC (Receiver)
Max No. of programmed units per receiver	100 Transmitters
Operating temperature	-30°C to +70°C
Modulation	GFSK





IDRC 433 K2



**IDRC 433 K3** 





IDC 433







**IDATN** 



## Safety sensors for pedestrian doors

Safety sensors usually use the infrared or laser technology. They are used to maintain the door open as long as someone is standing in the threshold area or in its proximity, avoiding contact with the doors.

### Sensor series

П

	LZR <sup>®</sup> -FLATSCAN REV-PZ	Laser safety sensor for automatic revolving doors.	14
	LZR <sup>®</sup> -FLATSCAN SW	Laser safety sensor for automatic swing doors.	15
	IXIO-S	Infrared safety sensor for automatic sliding doors.	16
·	4SAFE	4 beams safety sensor for automatic swing/revolving doors.	17
	EYE-TECH	1 beam safety sensor for swing/revolving doors.	18
1	SMART FOCUS	1 beam safety sensor for swing/revolving doors.	19
و م	MICROCELL	Infrared photo beam for a minimum level of safety on your automatic doors.	20

## LZR<sup>®</sup>-FLATSCAN REV-PZ





LZR<sup>®</sup>-FLATSCAN REV-PZ is a compact premium laser safety sensor for automatic revolving doors.

### **Features**

- 400 laser spots provide very high detection precision, and not affected by light, color and material of background.
- Can be installed on 4 meters height and keep the uncovered zone lower than 10 cm.
- Easy Installation and setting of the detection field .
- Two detection fields can be defined: left and right. And independent . output for each field.

### Installation 4

- Ceiling mounting and surface mounting are available. .
- Two visible spots help adjusting the position of curtains.
- Angle of curtains are adjustable: 0-5 degree.
- Additional parameters can be adjusted by remote control.



Revolving door applications



**Revolving door applications** 

### Application

- Safety for revolving door pinch zone.
- Other safety applications.

### Technical specifications

Technology	Time-of-flight	
Detection mode	Presence	
Max. detection range	4 m (diagonal)	
Power consumption	≤ 2W	
Temperature range	-30°C to +60°C if powered	
Supply voltage	12 V to 24 V DC ±15%	Remote cont
Protection degree	IP54	
Vibrations	<2 G	



Accessories

trol

# LZR<sup>®</sup>-FLATSCAN SW





LZR<sup>®</sup>-FLATSCAN SW is a compact and premium laser safety sensor for automatic swing doors.

### Features

- Compact in size and aesthetically pleasant.
- Detection field adjustable up to 4 m (diagonal).
- 170 laser spots ensuring 100% safety in front of the door wing.
- Edges are safe due to our extended field feature.
- Finger protection in the hinge area.
- Independent of the floor and the surroundings.

### Installation

- One module on each side is enough to secure the whole door, regardless of its size.
- Master-Slave operator compatible with 4SAFE.
- Mechanical angle can be adjusted from 2° to 10°.
- Specific adjustable settings thanks to 4 DIP-switches.
- Automatic teach-in: direct surroundings of the door and the type of floor.

### Application

Safety sensor for automatic swing doors.





Swing door applications

### Technical specifications

Technology	Time-of-flight
Detection mode	Presence
Max. detection range	4 m (diagonal)
Power consumption	≤2W
Temperature range	-30°C to +60°C if powered
Supply voltage	12 V to 24 V DC ±15%
Degree of protection	IP54
Remission factor	>2%
Vibrations	<2G



**Retrofit interface** 

## IXIO-S





IXIO-S is an active infrared presence sensor. The three dimensional area of its infrared curtain protects the users from any contact with the doors.

### Features

- 48 high-density infrared spotlights from 2 curtains protect users from any contact with the doors.
- 4 red spotlights visible on the ground to adjust the angle of the failsafe curtain.
- 10 possible widths of IR curtains, for optimum coverage of the door opening.
- A 32-bit microprocessor optimizes the processing of information coming from the environment, ensuring a stable performance throughout the year.
- Intuitive configuration with an LCD screen displaying texts and symbols (LCD graphics).

### Installation

- 10 adjustment options for the IR curtains.
- LCD screen with choice of language.
- Intuitive configuration thanks to an LCD screen and/or a BEA remote control.
- 4 infrared spotlights visible on the ground to enable easy adjustment of the failsafe curtain.

### Application

- IXIO-ST : safety sensor with self-monitoring.
- IXIO-SP : safety sensor with self-monitoring for pulsed safety door controls.

### Technical specifications

Technology	Active infrared
Detection mode	Presence
Outputs	Solid-state-relay (potential and polarity free)
Supply voltage	12 V to 24 V AC ±10%
	12 V to 30 V DC ±10%
Test input	Sensitivity: Low: < 1V ; High: > 10V
Temperature range	-25°C to +55°C;
	0-95% RH, non-condensing
Power consumption	< 2.5W
Degree of protection	IP54
Mounting height	2 m to 3.5 m



Sliding door applications



Sliding door applications

### Accessories



## **4SAFE**





4SAFE is an infrared safety sensor with background suppression technology making it suitable for sliding & revolving doors.

### **Features**

- A 4 SAFE module generates 4 spots on the floor covering a safety area of 400 mm in front of the door.
- Easy mounting with daisy-chain up to 6 modules, to cover the whole door width. Each module recognizes its status automatically and selects it in the daisy-chain.
- Adaptation to all floor types, even the most contrasted ones ÷ (stainless steel plates, grids, water puddles, snow-covered ground...).
- Every module has two selectable outputs for safety at . opening or closing, with just one cable.

### Installation

- Fine-tuning with 4 DIP-switches.
- Pressing the push button once is enough to adjust the sensor for the usual installation heights.
- Multiple slave modules to be connected to product the entire width . of the door leaves.

### Application

Safety of swing and revolving doors.

### Technical specifications

Technology	Active infrared
Detection mode	Presence
Number of beams	4 per module
Detection area	400 mm (W) × 70 mm (D)
Supply voltage	12 V - 24 V AC ± 10 % 12 V - 30 V DC -5%/+10%
Max. number of modules	4 (up to 6 if 24 V DC)
Dimensions	340 - 700 - 900 mm (L) × 43.5 mm (H) × 47.5 mm (D)
Temperature range	-25°C to +55°C
Degree of protection	IP53
Mounting height	Up to 3.5 m



Swing door applications



**Revolving door applications** 





Spotfinder

**Rain Accessory Fire Door Adapter** 





Multisensor hub Retrofit interface

## **EYE-TECH**





EYE-TECH is a basic active infrared safety sensor with background suppression technology making it suitable for swing & revolving doors.

### Features

- An EYE-TECH module generates a spot of ±10 cm diameter on the ground.
- Possibility of extending the detection area by adding "slave" modules.
- Additional safety device for low energy doors used by people with disabilities.

### Installation

- Mechanical adjustment of detection area.
- "Anti-masking" mode can be enabled.

### Application

- Automatic swing, revolving and low energy doors.







Swing door applications

### Technical specifications

Technology	Active infrared
Detection mode	Presence
Tilt angles	0°, 5°, 10°, 15°, 20°, 25°
Detection area	0.7 m to 2.5 m
Supply voltage	Relay output option: 12 V to 24 V AC/DC ±10% Transistor output option: 12 V to 30 V DC ±10%
Main frequency	50 to 60 Hz
Dimensions	340 - 700 - 900 mm (L) × 43.5 mm (H) × 47.5 mm (D)
Temperature range	-20°C to +55°C
Degree of protection	IP53
Mounting height	Up to 3 m





## **SMART FOCUS**





SMART FOCUS is a single beam sensor that can be used for activation or safety.

### Features

- Active infrared sensor operating with background suppression.
- Suitable for applications where accurate and narrow detection fields are required, up to a mounting height of 3 m.
- It has the ability to track changes in its background and environment.
- This sensor can adapt to variations in the background and ambient temperature, ensuring a greater reliability in most situations.

### Installation

- Push & go: for the most common applications and installation heights, a single press on the control button is enough. The sensing area is adjusted automatically.
- Manual mode: for special applications (greater height, reflective floors, horizontal applications, etc.), a "manual mode" using an adjusting screw and DIP-switch enables precise adjustments of the sensing area.

### Application

Automatic doors, barriers and gates, limited to a mounting height of 3 m.

### Technical specifications

· · · · · · · · · · · · · · · · · · ·	
Technology	Active infrared
Detection mode	Presence
Detection field	35 mm × 70 mm (at 2.2 m mounting height)
Tilt angle	-4° to +4°
Supply voltage	12 V - 24 V AC/DC -5% / +10%
Network frequency	50 - 60 Hz
Dimensions (With bracket) (Without bracket) Temperature range	144 mm (L) × 52 mm (H) × 43 mm (D) 110 mm (L) × 50 mm (H) × 30 mm (D) -25°C to +55°C
Degree of protection	IP53
Mounting height	Up to 3 m



**Revolving door applications** 



Swing door applications

### Accessories



Spotfinder

SMA

SBA

19

## MICROCELL





MICROCELL is a basic infrared photo beam for a minimum level of safety on your automatic doors.

### Features

- The Microcell range is available in several versions:
  - Microcell 1 : barrier composed by plug-in cylindrical heads with a 5 m cable and a control box with one relay.
  - Microcell 2 : barrier composed by plug-in cylindrical heads with a 5 m cable and a control box with two relays.
  - Microcell 3 : barrier composed by plug-in cylindrical heads with a 5 m cable and a monitored control box with transistor output.
  - Microcell SC : install the sensor directly without wiring control box.
- SBK 111: IP65 housing with LED to indicate wrong wiring and greater immunity form disturbances caused by ambient lighting.

### Installation

- Installation between the door leaves.
- An optional 10 m cable (L) is also available.(except Microcell SC)
- SBK 111 can be installed very near to the ground (20 cm), still offers a good range (6m).

### Application

- Provides minimum safety for automatic doors.
- Can be used for other applications (railways, security entrances, etc.).

### Technical specifications

Technology	Active infrared
Detection mode	Presence
Distance between beams	Microcell: Min. 0.3 m (crossed beams) SBK 111: Min. 0.2 m (beams inverted)
Detection area	1-5 m
Supply voltage	
(Microcell 1 and 2)	12 -24 V AC ±10%; 12-24 V DC -5/+30%
(Microcell 3/SC/SBK111)	12-24 V DC -5/+20%
Current consumption	< 100 mA (SBK 111<30 mA)
Beam aperture half-angle	8°
Degree of protection	IP65



Double beams



Single beam

### Accessories



MMA

Spotfinder



Combined sensor uses microwave technology and infrared technology in the same housing. This is by far the best and the safest option for automatic doors. This solution offers a reliable and stable detection microwave field combined with an infrared 3D safety curtain for complete safety for all users.

### Sensor series

Premium and most advanced 2 in 1 solution for automatic doors. 22	
IXIO-L  Standard 2 in 1 solution for automatic sliding doors.  23	
Economical 2 in 1 solution for automatic sliding doors. 24	
ZENSAFE  Entry level 2 in 1 solution for automatic sliding doors.  25	
SAFE1/2/4 Motion & presence solution for automatic sliding doors. 26	

## IXIO-D





IXIO-D is a premium sensor which combines radar technology for the activation of the door with infrared technology for the user protection, in accordance with the EN 16005, DIN 18650 and the AS 5007.

### Features

- SHOPPING STREET function for optimized parallel traffic rejection.
- Optimized for person with reduced mobility in hospital & public access doors.
- 48 high-density infrared spotlights from 2 curtains (3D safety) protect users from any contact with the doors.
- Unidirectional Sensor which enables the door to close sooner improving energy/ thermal efficiency and ideal for airlock application.
- A 32-bit microprocessor optimizes the processing of information coming from the environment, ensuring a stable performance throughout the year.
- IXIO-DT1: combined sensor with independent monitoring function. IXIO-DT3: applied to the emergency exit and standard automatic doors, there are 3 optional output mode (current/frequency/relay).

### Installation

- 10 adjustment options for the IR curtains.
- LCD screen with choice of language.
- Lateral orientation from -15° to +15° for the radar antenna.
- Intuitive configuration thanks to an LCD screen and/or a BEA remote control.
- 4 infrared spotlights visible on the ground for easy adjustment of the failsafe curtain.

### Application

Opening and safety of linear, telescopic and curved automatic sliding doors.

### Technical specifications

Technology	Microwave and active infrared
Detection mode	Motion and presence
Number of curtains	2
Supply voltage	12 V to 24 V AC ±10% 12 V to 30 V DC ±10%
Power consumption	< 2.5 W
Temperature range	-25°C to +55°C
Degree of protection	IP54
Mounting height	2 m to 3.5 m
Norm conformity	EN 16005, DIN 18650 and AS 5007



Sliding door applications



Sliding door applications



CDA

Accessories

Rain accessory Re

**Remote control** 

## **IXIO-L**





IXIO-L is a standard sensor that combines a motion radar sensor for opening the door with active infrared curtain for the protection of users, in accordance with the EN 16005 standard and the AS 5007.

### **Features**

- The IXIO-L is an economical version of the IXIO-DT1, using DIPswitch for setting adjustment.
- . Unidirectional sensor which enables the door to close sooner improving energy/ themal effciency and ideal for Airlock application.
- SHOPPING STREET function for optimized parallel traffic rejection.
- Higher immunity for critical environment. .
- 48 high-density infrared spotlights from 2 curtains (3D safety) . protect users from any contact with the doors.
- A 32-bit microprocessor optimizes the processing of information coming from the environment, ensuring a stable performance throughout the year.

### Installation

- Retrofit installations to Eagle 6safe & Active8 sensors.
- Lateral orientation from -15° to +15° for the radar antenna. .
- Installation also with BEA universal remote control.

### Application

Opening and safety of linear, telescopic and curved automatic . sliding doors.

### Technical specifications

Technology	Microwave and active infrared
Detection mode	Motion and presence
Number of curtains	2
Supply voltage	12 V to 30 V DC ±10%
Power consumption	< 2 W
Temperature range	-25°C to +55°C
Degree of protection	IP54
Mounting height	2 m to 3.5 m
Norm conformity	EN 16005 and AS 5007



Sliding door applications



Sliding door applications



## VIO-D





VIO-D is an opening & safety sensor for automatic sliding doors, in accordance with the EN 16005 and AS 5007.

### Features

- The unidirectionality of the VIO-DT1 enables energy savings to be made within the building. The door closes sooner and reduces thermal losses.
- Substantial protection of individuals thanks to the two 24-infrared spot (3D safety) failsafe curtains.
- High levels of active infrared immunity.
- · Simple adjustments using DIP-switches and potentiometer.

### Installation

- Settings using 4 DIP-Switches.
- Adjustment of the field size using a potentiometer.
- Positioning adjustment of the infrared curtains with adjustment screws.

### Application

Opening and safety of automatic sliding doors.



Sliding door applications



Sliding door applications

### Technical specifications

Technology	Microwave and active infrared
Detection mode	Motion and presence
Tilt angles	Microwave: 15° to 50° vertical (adjustable) Infrared: from -4°to +4°
Supply voltage	12 V to 30 V DC -5% /+10%
Power consumption	< 2.2 W
Temperature range	-20°C to +55°C
Degree of protection	IP54
Mounting height	1.8 m to 3 m
Norm conformity	EN 16005 and AS 5007

### Accessories



## ZENSAFE





ZENSAFE is an entry level 2 in 1 sensor solution combining a bidirectional radar sensor for the opening and 1 curtain with infrared spots for safety.

### Features

- Opening and safety in one sensor.
- 1 safety curtain with 24 active infrared spots.
- Bidirectional sensing detection offering a reliable and comfortable opening.
- The angle of infrared curtain can adjust easily from -5° to +8°.
- Aesthetically pleasant.
- Easy to install.

### Installation

- Easy installation thanks to the factory configuration.
- Adjust the opening detection area with the potentiometer.
- Possibility to adjust the presence time and the immunity via dip switches.
- The angle of infrared detection field can adjust via the screw.
- Easy to open by hand.
- Plug & Play.

### Application

Opening and safety of linear, telescopic and curved automatic sliding doors.

### Technical specifications

Technology	Microwave and active infrared
Detection mode	Motion and presence
Supply voltage	12 V - 24 V AC ±10%;
	12 V - 30 V DC 0%/+10%
Power consumption	< 3 W
Hold time output signal	0.5 s
Temperature range	-25°C to +55°C
Degree of protection	IP54
Mounting height	1.8 m to 3 m



Sliding door applications



Sliding door applications

### Accessories



## SAFE 1/2/4





SAFE 1/2/4 is a motion and/or presence sensor for automatic sliding doors.

### Features

- Motion and/or Presence in one sensor.
- The angle of infrared curtain is adjustable.
- Robust and elegant design.
- SAFE1: 1 curtain with 24 active infrared spots.
  SAFE2: 2 curtains, curtain 1 with 24 active infrared spots, curtain 2 with16 active infrared spots.
  - SAFE4: 4 curtains, curtain 1 with 24 active infrared spots, curtain 2-4 with16 active infrared spots.

### Installation

- Easy to adjust the presence time, immunity and detection mode via DIP-switches.
- 4 infrared spotlights visible on the ground for easy adjustment of the failsafe curtain.

### Application

- Opening and safety of linear, telescopic and curved automatic sliding doors.
- Side screen safety presence sensor for sliding doors.
- Presence sensor for secured access (RFID/ Keypad/ Remote) operated doors.

### Technical specifications

Technology	Active infrared with background analysis
Detection mode	Motion and/ or presence
Curtain adjustable range	18.5°(curtain 1: from 1.5° to 20° )
Supply voltage	12 V - 24 V AC ±10%;
	12 V - 30 V DC -5%/+10%;
	110 V AC ±10%
Power consumption	
SAFE 1	<2 W
SAFE 2/4	<2.5 W
Hold time output signal	500 ms
Degree of protection	IP54
Mounting height	1.8 m to 3 m



Sliding door applications



Sliding door applications

### Accessories



26



## **Sensor Solution for escalators**

BEA has a range of sensors that can be used in escalator applications. These sensors are used to increase pedestrian comfort on escalators, passenger flow detection, energy efficiency and counting.

### Sensor series

٠	CGS-E	A concealed microwave sensor for energy saving escalator application.	28
<b>U</b>	COLIBRI ONE	A mini-type microwave sensor for retrofit or new escalator applications.	29
	MICROCELL SC	An infrared photo beam sensor for reliable detection.	30

## CGS-E





CGS-E is a concealed activation microwave sensor for energy saving escalator application.

### Features

- BEA software to ignore the mechanical movements inside the escalator and detect people safely moving towards the escalator.
- Radar technology is unaffected by light, color and dust.
- Unidirectional sensing reduces number of false detection.
- IP65 rated housing allows for flexibility in harsh installations.
- Adjustable detection field of up to 5 m.

### Installation

Allows for recessing into escalators improving aesthetics.

### Application

Escalators, passenger flow detection, etc.



**Escalator applications** 



Escalator applications

### Technical specifications

Technology	Microwave, 24.150 GHz
Detection mode	Motion
Detection distance	1 to 5 m
Supply voltage	12 V to 24 V DC -10%/+30%
Power consumption	< 2 W (VA)
Temperature range	-20°C to +55°C
Degree of protection	IP65
Dimensions	58 mm (L) × 43 mm (H) × 34.4 mm (W)
Cable length	5 m

### Accessories

# **COLIBRI ONE**





COLIBRI ONE is a mini-type microwave sensor for escalator applications.

### Features

- Unidirectional version only detects the pedestrian who walks toward the escalator.
- Manual adjustment of the sensitivity by potentiometer.
- Optimized design with a miniature and translucent housing.

### Installation

- Easy to adjust the angle of antenna and define the position of detection field. Vertical: from 0° to 90°, Lateral: from -30° to +30°.
- Ideal for new & retrofit installation.

### Application

- Escalators, passenger flow detection, etc.



**Escalator applications** 



**Escalator applications** 

### Technical specifications

Technology	Microwave, 24.150 GHz
Detection mode	Motion
Supply voltage	12 V - 24 V DC -10%/+30%
Power consumption	< 2W
Temperature range	-20°C to +55°C
Degree of protection	IP54
Angle adjustment	0°to 90°(Vertical), -30°to +30°(Lateral)
Dimensions	80 mm(L)×60 mm(H)×55 mm(W)
Cable length	2.5 m

### Accessories

## **MICROCELL SC**





MICROCELL SC is a basic infrared sensor used to start and stop the sensor for escalators and moving walkways.

### Features

- Compact & Robust.
- PNP or NPN output with high response time.
- Excellent detection capability even in harsh conditions.

### Installation

- Integrate controller, receiver sends out signal directly.
- Quick installation thanks to a "snap-in" mechanism on the housing.

### Application

Auto-starting of escalators and moving walkways.



**Escalator applications** 



**Escalator applications** 

### Technical specifications

Technology	Infrared beam
Installation height	0.2 m above Ground
Detection distance	0.6 m to 1.5 m
Supply voltage	12 V to 24 V DC -5%/+20%
Power consumption	Transmitter < 10 mA;
	Receiver < 10 mA
Microcell versions	NPN/N, PNP/N, NPN/R, PNP/R
Protection degree	IP65 (DIN40050)
Temperature range	-20°C to +60°C
Cable length	5 m

### Accessories

### CHINA

4th, 5th Floor, M8 Building, No.1 Jiuxianqiao East Road, Chaoyang District, Beijing,China

- **T** +(8610) 5776 1630
- **F** +(8610) 6262 8775

**E** info@bea-asiapacific.com

### www.bea-asiapacific.com

### SINGAPORE

8 Admiralty Street #05-02, Admirax,Singapore 757438

- **T** +65 6395 8441
- **F** +65 6774 7555
- E info@bea-asiapacific.com

### JAPAN

8F Yokohama Nishiguchi K building, 2-8-19 Kitasaiwai Nishi-ku, Yokohama Kanagawa, 220-0004, Japan

T +81 4 5565 9560F +81 4 5565 9561

E info@beajapan.co.jp

