Terminal A ✈ 🧳

BEA

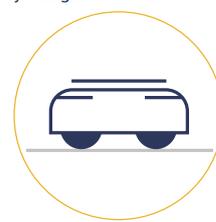# PEDESTRIAN ENTRANCE SENSORS

Pedestrian Entrance Sensors

Industrial Door & Gate Sensors

Factory & Logistic Automation Solutions

A **Halma** company
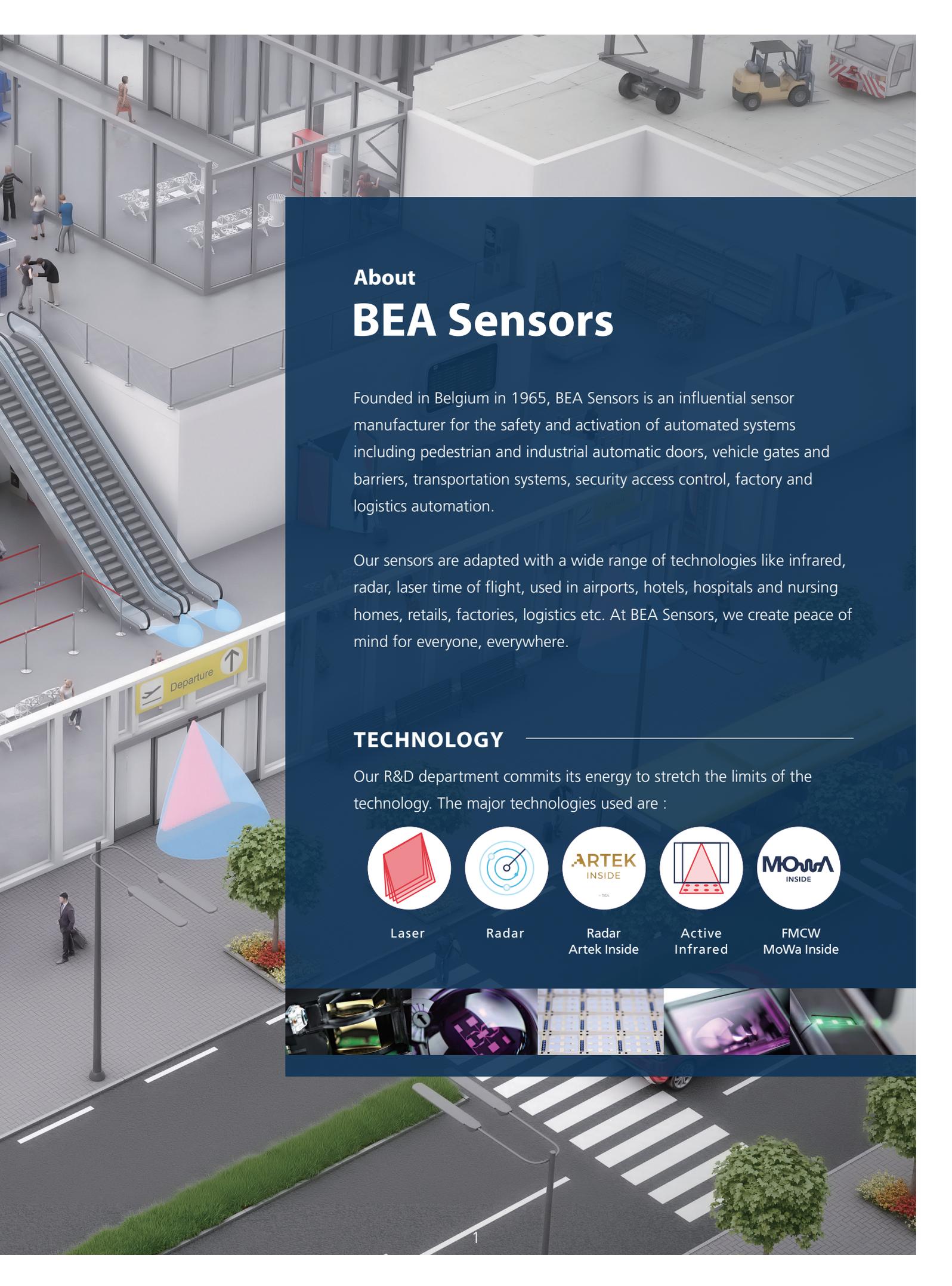
CONTENTS

About
BEA Sensors

Founded in Belgium in 1965, BEA Sensors is an influential sensor manufacturer for the safety and activation of automated systems including pedestrian and industrial automatic doors, vehicle gates and barriers, transportation systems, security access control, factory and logistics automation.

Our sensors are adapted with a wide range of technologies like infrared, radar, laser time of flight, used in airports, hotels, hospitals and nursing homes, retails, factories, logistics etc. At BEA Sensors, we create peace of mind for everyone, everywhere.

TECHNOLOGY

Our R&D department commits its energy to stretch the limits of the technology. The major technologies used are :

Laser	Radar	Radar Artek Inside	Active Infrared	FMCW MoWa Inside

Combined Sensors for Automatic Pedestrian Doors

The combined sensor integrates multiple technologies within a single housing, making it an ideal solution for automatic sliding doors. These sensors provide reliable and stable detection fields combined with safety light curtains to ensure complete protection for all users.

Product Series

ORASCAN

Opening & Safety Sensor for Automatic Sliding Doors

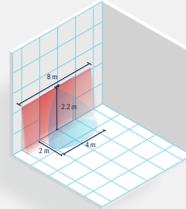|	
Technology	Radar & Laser
Color	⬢ ⬡
Detection Area	

Scan to discover more

FEATURES

- First-ever opening and safety sensor for sliding doors, combining radar and laser technology.
- A versatile solution for sliding doors of all sizes and types, including large doors, telescopic doors, hermetic doors, etc.
- All-in-one sensing solution with functions of opening, and safety protection of leading edge/threshold/side screens.
- A 180° detection angle combined with 5 laser curtains ensures complete door coverage with no blind spots for maximum safety.
- Easy installation, configuration, and monitoring via an intuitive mobile app.
- Supports up to 4 virtual push buttons for contactless on-demand access.
- Robust, dust- and water-resistant design suitable for demanding indoor and outdoor environments.

TECHNICAL SPECIFICATIONS

|	
Technology	Radar + LASER (ToF)
Detection mode	Motion & Presence
Supply voltage	12V to 30V DC ±10% External electrical sources must ensure double insulation from primary voltages.
Max power consumption	< 5W
Mounting height	2m to 3.5m
Temperature range	-25°C to +55°C; 0 - 95% relative humidity, non-condensing
Vibrations	< 2G
Degree of protection	IP54 (IEC/EN 60529)
Norm conformity	EN 16005, DIN 18650
Bluetooth®	Operating bandwidth: 2402 MHz - 2480 MHz Maximum transmitted power: 12 dBm

APPLICATIONS

Automatic Sliding Doors

Virtual Push Buttons
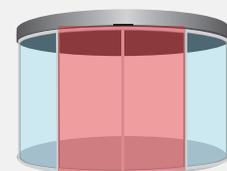
Automatic Curved Doors

LZR®-FLATSCAN SL
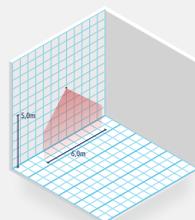
Multi-functional Sensor for Automatic Sliding Doors

|	
Technology	Laser
Color	⬢ ⬢
Detection Area	

Scan to discover more

FEATURES

- 400 laser spots form a high-density detection curtain, ensuring enhanced pedestrian safety - ideal for high-safety applications such as residential and medical doors.

- 2 visible light spots clearly indicate the detection curtain position, enabling fast and precise adjustment.

- Virtual push buttons can be flexibly configured, with adjustable size and position.

- Press and hold the virtual button to keep the door open as required. Ideal for residential applications and convenience stores with continuous traffic.

- High-precision laser technology ensures an uncovered zone of less than 10cm, effectively protecting children, pets, and small objects.

- Available in surface-mounted and recessed versions to accommodate different installation environments and design requirements.

TECHNICAL SPECIFICATIONS

Technology	LASER (ToF)
Detection mode	Presence
Max. installation height	24m (reflectivity 5%); 5m (reflectivity 8%)
Supply voltage	12V to 24V DC ± 15 %
Power consumption	≤ 2.2W
Dimensions	Recessed version: 178mm (L) × 85mm (H) × 53mm (D) Surface version: 168mm (L) × 93mm (H) × 42.5mm (D)
Protection degree	IP54 (EN 60529)
Temperature range	-30°C to +60°C if powered
Humidity	0 - 95% non-condensing
Vibrations	< 2G

APPLICATIONS
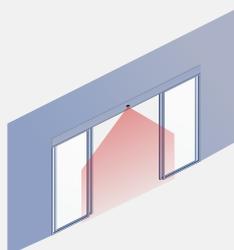
Automatic Sliding Doors
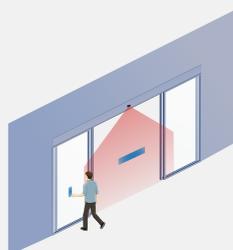
Virtual Push Buttons

IXIO-D

Opening and Safety Sensor for Automatic Sliding Doors

Technology Radar **ARTEK** INSIDE & Active Infrared

Color

Detection Area

FEATURES

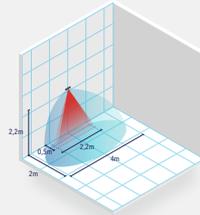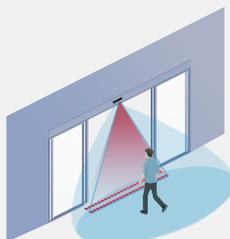- 48 high-density infrared spots form two safety curtains (3D protection), providing enhanced pedestrian safety.
- Unidirectional microwave detection enables earlier door closing, improving energy efficiency and making it ideal for airlock applications.
- "Shopping Street" function filters parallel traffic to reduce unnecessary door openings and optimize energy savings.
- Optimized for persons with reduced mobility in hospital & public access doors.
- A 32-bit microprocessor intelligently processes environmental data to ensure stable performance throughout the year.
- 4 visible spots assist with precise curtain alignment and simplified setup.
- IXIO-DT1: combined sensor with an independent monitoring function.
- IXIO-DT3: Designed for emergency exits and standard automatic doors, offering three selectable output modes (current, frequency, or relay).

TECHNICAL SPECIFICATIONS

Technology	Radar and active infrared
Detection mode	Motion and presence
Number of curtains	2
Supply voltage	12V to 24V AC ±10% 12V to 30V DC ±10%
Power consumption	< 1.5W
Temperature range	-25°C to +55°C
Degree of protection	IP54
Mounting height	2m to 3.5m
Norm conformity	EN 16005, DIN 18650 and AS 5007

APPLICATIONS

Automatic Sliding Doors

IXIO-L

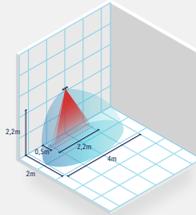## Opening and Safety Sensor for Automatic Sliding Doors

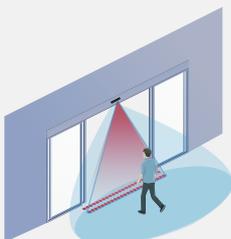| Technology | Radar & Active Infrared |
| Color | ⬡ ⬡ ⬡ |
| Detection Area | |

FEATURES

- The IXIO-L allows parameter configuration via DIP switches.
- Unidirectional microwave detection enables earlier door closing, improving energy efficiency and making it ideal for airlock applications.
- "Shopping Street" function filters parallel traffic to reduce unnecessary door openings and optimize energy savings.
- High immunity to environmental interference, ensuring reliable performance in demanding conditions.
- 48 high-density infrared spots form two safety curtains (3D protection), providing enhanced pedestrian safety.
- A 32-bit microprocessor intelligently processes environmental data to ensure stable performance throughout the year.
- Offers 10 different infrared detection widths to meet various on-site requirements.

TECHNICAL SPECIFICATIONS

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

APPLICATIONS

Automatic Sliding Doors

VIO-D

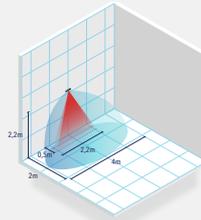## Opening and Safety Sensor for Automatic Sliding Doors

Technology	Radar & Active Infrared
Color	⬡ ⬡ ⬡
Detection Area	

2.2m
0.5m   2.2m
4m
2m

Scan to discover more

FEATURES

- Unidirectional microwave detection enables earlier door closing, reducing energy loss and improving building efficiency.
- 2 safety curtains composed of 24 infrared spots provide reliable pedestrian protection.
- High immunity of the active infrared system ensures stable performance in challenging environments.
- Simple adjustments using DIP-switches and potentiometer.
- Maximum mounting height of up to 3m.

TECHNICAL SPECIFICATIONS

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

APPLICATIONS

Automatic Sliding Doors

ZENSAFE

Opening and Safety Sensor for Automatic Sliding Doors

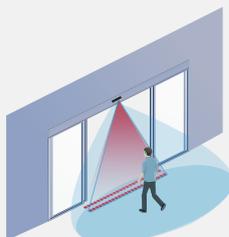| Technology | Radar & Active Infrared |
| Color | ⬢ ⬢ |

Scan to discover more

FEATURES

- Opening and safety in one sensor.
- 1 safety curtain with 24 active infrared spots.
- Bidirectional sensing detection offering a reliable and comfortable opening.
- Infrared curtain angle easily adjustable from –5° to +8°.
- Robust and elegant design.
- Easy to install.

TECHNICAL SPECIFICATIONS

Technology	Radar and active infrared
Detection mode	Motion and presence
Supply voltage	12V to 24V AC ±10%; 12V to 30V DC 0%/+10%
Power consumption	< 3W
Hold time output signal	500ms
Temperature range	-25°C to +55°C
Degree of protection	IP54
Mounting height	1.8m to 3m

APPLICATIONS

Automatic Sliding Doors

SAFE 4

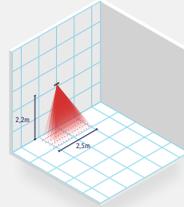## Motion and Presence Sensor for Automatic Sliding Doors

|	
Technology	Active Infrared
Color	⬢ ⬢
Detection Area	

FEATURES

- Motion and presence detection in one sensor.
- The angle of the infrared curtain is adjustable.
- Compact and elegant design.
- Available in surface-mounted and recessed versions to meet various installation requirements.
- 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.

TECHNICAL SPECIFICATIONS

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

APPLICATIONS
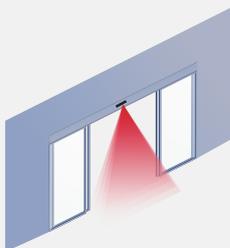
Automatic Sliding Doors

Safety Sensors for
Automatic Pedestrian Doors

Safety sensors typically use laser or infrared technology. These sensors ensure that when a person or an object is present within the detection field, the door remains open, preventing contact and avoiding impact or pinching injuries.

Product Series

LZR®-FLATSCAN 3D SW

Safety Sensor with Intentional Opening for Automatic Swing Door
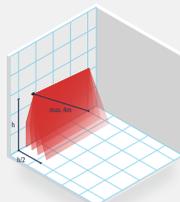
Technology	Laser
Color	⬢ ⬡ ⬡
Detection Area	

Scan to discover more

FEATURES

- Comprehensive safety solution for automatic swing doors, protecting the hinge, edge, and door leaf areas.

- 4 laser curtains composed of 700 detection points accurately detect the presence of people or objects within the pathway, preventing unintended door movement and ensuring safe passage.

- High-resolution volumetric detection reliably detects fingers and body parts, providing enhanced protection of the hinge area and reducing the risk of pinching.

- Supports up to 2 virtual push buttons or curtain-based activation for hygienic, contactless door operation.

- Intelligent early door closing improves energy efficiency without compromising safety.

- A dynamic laser curtain at the door's edge creates a 3D detection field, which instantly detects obstructions and triggers a reopen, ensuring safe yet seamless access.

- Glass wall teach-in function: it learns the glass environment and creates a virtual wall with a simple hand gesture for effortless glass environment handling.

TECHNICAL SPECIFICATIONS

Technology	LASER (ToF)
Detection mode	Presence
Max. Detection range	4m (diagonal) with reflectivity of 2% (i.e. : at W = 1.5m -> max. H = 3.7m)
Supply voltage	12V to 24V DC ± 15%
Power consumption	≤ 2W
Dimensions	145mm (L) × 88mm (H) × 60mm (D) (mounting base + 7mm)
Protection degree	IP44 (EN 60529)
Temperature range	-25°C to +60°C
Humidity	0-95% non-condensing
Vibrations	< 2G
Norm conformity	EN 16005, DIN 18650

APPLICATIONS

Automatic Swing Doors

Extended Safety Area During Closing

Opening Function by Approach

LZR®-FLATSCAN SW

Safety Sensor for Automatic Swing Doors

Technology	Laser
Color	⬡ ⬡ ⬡
Detection Area	
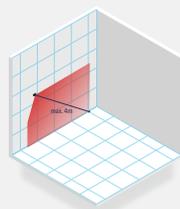
Scan to discover more

FEATURES

- A single sensor per door leaf side ensures full door protection, reducing hardware and wiring costs.
- 100 laser spots provide precise pinch protection for the hinge area.
- 70 laser light spots safeguard the door leaf, ensuring complete safety in this zone.
- Adaptive learning memorizes the surrounding environment and dynamically adjusts the detection field to reduce false activations and ensure long-term stable operation.
- Resistant to floor reflections and environmental interference, ensuring reliable performance in various installation conditions.

TECHNICAL SPECIFICATIONS

Technology	LASER (ToF)
Detection mode	Presence
Max. detection range	4m (diagonal)
Supply voltage	12V to 24V DC ±15%
Power consumption	≤ 2W
Temperature range	-30°C to +60°C if powered
Demensions	142mm (L) × 85mm (H) × 33mm (D) (mounting base + 7mm)
Degree of protection	IP54
Remission factor	> 2%
Vibrations	< 2G
Norm confirmatiy	EN 16005, DIN 18650 and AS 5007

APPLICATIONS
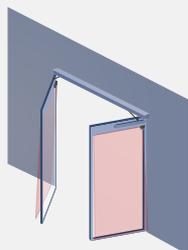
Automatic Double Swing Doors

Automatic Single Swing Doors

LZR®-FLATSCAN GO

Laser Sensor for Leaf Protection of Automatic Swing Doors

Technology	Laser
Color	⬢
Detection Area	
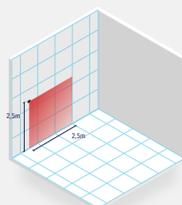
Scan to discover more

FEATURES

- 70 laser spots monitor the swing door leaf area, ensuring reliable protection.
- Uncovered zone reduced to just 10cm, significantly lowering risks — ideal for protecting children, pets, and low-lying objects.
- Fast and intuitive installation.
- Independent of floor conditions and surroundings.
- Compact and elegant design.

TECHNICAL SPECIFICATIONS

Technology	LASER (ToF)
Detection mode	Presence
Max. Detection range	max. 2,50m (height) and 2,50m (width) with reflectivity of 2%
Supply voltage	12V to 24V DC ± 15%
Power consumption	≤ 2W
Dimensions	146mm (L) × 85mm (H) × 32mm (D) (mounting base + 7mm)
Protection degree	IP54 (IEC/EN 60529)
Temperature range	-30°C to +60°C if powered
Humidity	0-95% non-condensing
Vibrations	< 2G

APPLICATIONS

Automatic Double Swing Doors

Automatic Single Swing Doors

4SAFE

Safety Sensor for Automatic Swing Doors and Revolving Doors

Technology	Active Infrared
Color	⬡ ⬡
Detection Area	

EN 16005
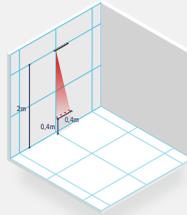
Scan to discover more

FEATURES

- A single 4SAFE module emits 4 infrared spots, providing reliable safety protection for a 400mm zone 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.

- Protection range can be extended by daisy-chaining modules (e.g., up to 800mm with two modules) to accommodate future safety upgrades.

- Each module features dual signal outputs to protect both sides of the door leaf simultaneously, requiring only a single cable connection for simplified wiring.

TECHNICAL SPECIFICATIONS

Technology	Active infrared
Detection mode	Presence
Number of beams	4 per module
Detection area	400mm (W) × 70mm (D)
Supply voltage	12V to 24V AC ± 10% 12V to 30V DC -5%/+10%
Max. number of modules	4 (up to 6 if 24V 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 3.5m

APPLICATIONS

Automatic Swing Doors

Automatic Revolving Doors

EYE-TECH

Safety Sensor for Automatic Swing Doors and Revolving Doors

Technology   Active Infrared

Color   ⬡ ⬡
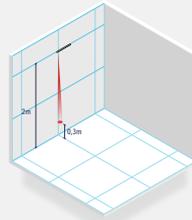
Detection Area

FEATURES

- An EYE-TECH module generates a spot of ±10cm diameter on the ground.
- Possibility of extending the detection area by adding "slave" modules.
- Additional safety device for low-energy automatic doors to facilitate smooth passage for people with reduced mobility.
- Detection area position can be easily adjusted via mechanical angle adjustment.
- Anti-masking function can be enabled or disabled via jumper settings to prevent false activations.

TECHNICAL SPECIFICATIONS

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

APPLICATIONS

Automatic Swing Doors

LZR®-FLATSCAN REV-PZ

Safety Sensor for Automatic Revolving Doors

Technology   Laser

Color   ⬡ ⬡
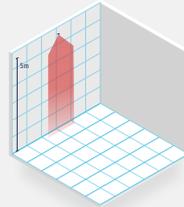
Detection Area

FEATURES

- Suitable for pinch zone and moving door leaf leading-edge protection.

- 400 laser spots form a high-density detection field, ensuring stable performance even under strong sunlight or complex floor conditions.

- Detection field can be divided into left and right zones with independent outputs.

- Supports installation heights up to 5m with an uncovered zone of less than 10cm.

- 2 visible laser spots assist with quick curtain alignment.

- Gesture-based configuration enables fast and easy setup.

- Available in recessed and surface-mounted versions for different installation requirements.

TECHNICAL SPECIFICATIONS

Technology	LASER (ToF)
Detection mode	Presence
Max. detection range	4m (diagonal), with reflectivity of 5 % 5m (diagonal), with reflectivity of 8 %
Power consumption	≤ 2.2W
Temperature range	-30°C to +60°C if powered
Supply voltage	12V to 24V DC ±15%
Protection degree	IP54
Vibrations	< 2G

APPLICATIONS
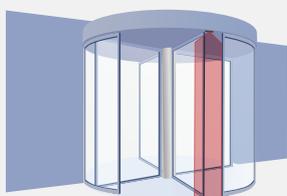
Automatic Revolving Doors

Automatic Revolving Doors

LZR®-FLATSCAN REV-SLZ

Safety Sensor for Automatic Revolving Doors and Revolving Doors with Integrated Sliding Doors

Technology	Laser
Color	⬢ ⬡
Detection Area	
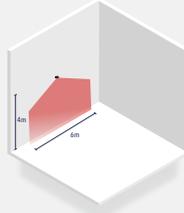
FEATURES

- Suitable for safety protection of revolving door leaf areas and internal sliding door zones.

- 400 laser spots form a high-precision detection field, ensuring stable performance even under strong sunlight or complex floor conditions.

- Detection field can be divided into left and right zones with independent outputs.

- Supports installation heights up to 4m with an uncovered zone of less than 10cm.

- Available in recessed and surface-mounted versions to suit different installation requirements.

TECHNICAL SPECIFICATIONS

Technology	LASER (ToF)
Detection mode	Presence
Installation height	Max: 4m (EN16005 /DIN18650-1) Min: 2m
Power consumption	≤ 2.2W
Temperature range	-30°C to +60°C if powered
Supply voltage	12V to 24V DC ±15%
Protection degree	IP54
Vibrations	< 2G

APPLICATIONS

Automatic Revolving Doors

Automatic Revolving Doors

LZR®-FLATSCAN REV-LZ

Safety Sensor for Door Leaves of Revolving Doors

Technology	Laser
Color	⬢ ⬢ ⬡
Detection Area	
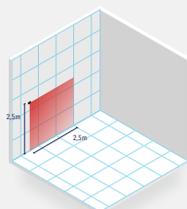
FEATURES

- Designed for automatic revolving doors, providing reliable safety protection for the door leaves.
- 70 laser spots fully cover the door leaf area, ensuring accurate and reliable detection.
- Laser based technology with high immunity to environmental interference, ensuring stable operation.
- Supports installation heights up to 4m with an uncovered zone of less than 10cm.
- Easy installation with gesture-based configuration of the detection field.

TECHNICAL SPECIFICATIONS

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

APPLICATIONS

Automatic Revolving Doors

SMART FOCUS

Safety Sensor for Automatic Doors

Technology	Active Infrared
Color	⬢
Detection Area	
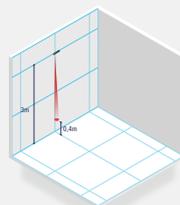
FEATURES

- Active infrared sensor with background suppression for stable, interference-resistant detection.
- Designed for pinch-zone protection in revolving door columns and collision protection in display cabinets.
- Suitable for narrow detection areas, such as restaurant kitchens and other confined spaces.
- Supports installation heights up to 3m.
- Multiple mounting accessories available for both surface and recessed installation.

TECHNICAL SPECIFICATIONS

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

APPLICATIONS

Automatic Revolving Doors

Automatic Swing Doors
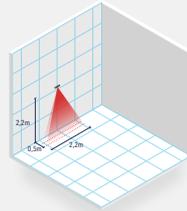
IXIO-S

Safety Sensor for Automatic Sliding Doors

Technology	Active Infrared
Color	
Detection Area	

Scan to discover more

FEATURES

- 48 high-density infrared spots form two safety curtains, providing enhanced pedestrian protection.
- 10 selectable infrared curtain widths for flexible installation & configuration.
- 32-bit microprocessor optimizes signal processing to ensure stable sensor operation.
- 4 visible spots help position the first light curtain for easy angle adjustment.
- Intuitive parameter configuration via an LCD display with icons and text.
- Supports installation heights up to 3.5m.

TECHNICAL SPECIFICATIONS

Technology	Active infrared
Detection mode	Presence
Outputs	Solid-state-relay (potential and polarity free)
Supply voltage	12V to 24V AC ±10% 12V to 30V DC ±10%
Test input	Sensitivity: Low: < 1V ; High: > 10V
Temperature range	-25°C to +55°C; 0-95% RH, non-condensing
Power consumption	< 1.5W
Degree of protection	IP54
Mounting height	2m to 3.5m

APPLICATIONS

Automatic Sliding Doors

Automatic Sliding Doors

20
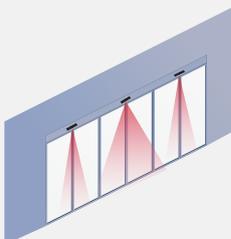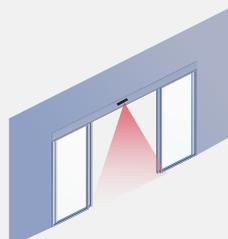
SAFE 1

Safety Sensor for Automatic Sliding Doors

Technology	Active Infrared
Color	⬢ ⬢
Detection Area	
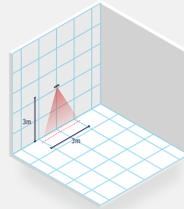
FEATURES

- 1 safety curtain with 24 infrared spots detects people or objects within the protected area.
- Presence time, immunity, and operating mode adjustable via DIP switches for flexible configuration.
- 4 visible spots assist with curtain positioning and alignment for faster installation and setup.
- Available in surface-mounted and recessed versions to suit different installation requirements.
- Supports installation heights up to 3m.
- Compact and elegant design saves installation space.

TECHNICAL SPECIFICATIONS

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

APPLICATIONS
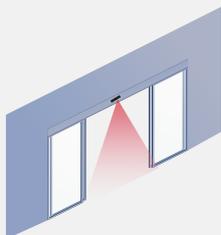
Automatic Sliding Doors

MICROCELL

Infrared Photocell for Basic Safety Protection of Automatic Doors

Technology	Active Infrared
Color	⬢

Scan to discover more

FEATURES

- A detection zone is formed by infrared beams transmitted between the emitter and the receiver.
- Narrow beam divergence reduces interference from ambient light and nearby devices.
- Available with relay, NPN, or PNP output for compatibility with different systems.
- IP65 protection rating.
- CE certified and compliant with RoHS 2.0 standard.
- Maximum detection distance up to 5m.

TECHNICAL SPECIFICATIONS

Technology	Active infrared
Detection mode	Presence
Distance between beams	Microcell: Min. 0.3m (crossed beams)
Detection area	1m to 5m
Supply voltage (Microcell 1 and 2) (Microcell SC)	12V to 24V AC ±10%; 12V - 24V DC -5/+30% 12V to 24V DC -5/+20%
Current consumption	<100mA
Degree of protection	IP65

APPLICATIONS
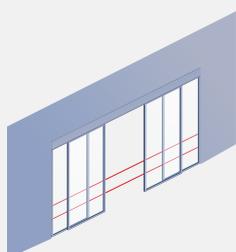
Automatic Sliding Doors

Opening Sensors for
Automatic Pedestrian Doors

Opening sensors detect movement within the detection area and trigger automatic door opening. Suitable for both indoor and outdoor environments, including challenging conditions such as rain, snow, fog, frost, or fallen leaves.

Product Series

EAGLE ARTEK

Opening Sensor for Automatic Doors

Technology	Radar	ARTEK INSIDE
Color	■ ■ ⬡
Detection Area	

2,2m
6m
2,2m
2m
2m

Scan to discover more

FEATURES

- Universal opening sensor for automatic doors, offering reliable operation regardless of ambient conditions.
- Slim and compact design with unidirectional detection to optimize door opening and closing cycles.
- Optimized cross-traffic rejection reduces unwanted detections from parallel movements near the door.
- Detection field shape and size can be quickly adjusted via push buttons.
- Compatible with EAGLE ONE mounting references, allowing easy replacement in existing installations.
- Adjustable antenna angles (vertical 0°–90°, horizontal -30°–+30°) for precise positioning of the detection field.
- Flexible mounting height from 1.8m to 4m to suit different door installations.

TECHNICAL SPECIFICATIONS

Technology	Radar (Artek Inside), 24.125GHz
Detection mode	Motion
Max. Detection range	Wide: 4m × 2m | Narrow: 2m × 2.2m @2.2m high
Minimum detection speed	5cm/s
Supply voltage	12V to 24V AC ±10%; (50 to 60Hz) 12V to 24V DC +30% / -10%*
Max. Power consumption	< 1W
Temperature range	-20°C to +55°C
Degree of protection	IP54
Mounting height	1.8m to 4m

APPLICATIONS

Automatic Swing Doors

Automatic Sliding Doors
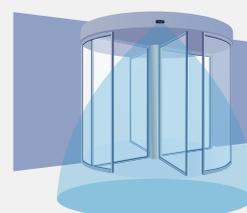
Automatic Revolving Doors

EAGLE 1 HM

Opening Sensor for Automatic Doors

Technology	Radar
Color	⬢ ⬡ ⬡
Detection Area	

FEATURES

- Universal opening solution suitable for all types of automatic doors.
- Mounted above the pivot of automatic swing doors, providing reliable activation with elegant appearance.
- BEA-developed antenna provides a stable and reliable detection zone.
- Unidirectional detection improves building energy efficiency.
- Suitable for large automatic doors with mounting heights up to 5m.
- Adjustable antenna angles (vertical 0°–90°, horizontal -30°–+30°) for flexible installation.

TECHNICAL SPECIFICATIONS

|	
Technology	Radar, 24.150GHz
Detection mode	Motion
Detection area	4m (W) × 2m (D) (wide); 2m (W) × 2.5m (D) (narrow)
Supply voltage	12V to 24V AC ±10%; 12V to 24V DC -10% /+30%
Power consumption	< 2W
Dimensions	120mm (W) × 80mm (H) × 50mm (D)
Temperature range	-20°C to + 55°C
Degree of protection	IP54
Mounting height	Up to 5m

APPLICATIONS

Automatic Swing Doors

Automatic Sliding Doors

Automatic Revolving Doors
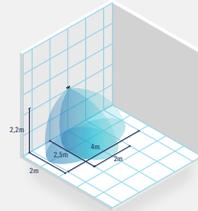
EAGLE 6+ DRO

Opening Sensor for Automatic Doors

Technology	Radar
Color	⬣ ⬡ ⬡
Detection Area	
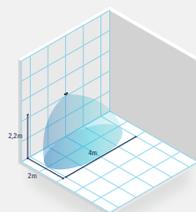
FEATURES

- BEA-developed antenna provides a stable and reliable detection zone.
- Unidirectional detection improves building energy efficiency.
- Wide detection zone ensures reliable detection while enhancing user comfort.
- Detection range adjustable via sensitivity potentiometer.
- Adjustable antenna angles (vertical 0°–90°, horizontal -30°–+30°) for flexible installation.

TECHNICAL SPECIFICATIONS

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

APPLICATIONS

Automatic Sliding Doors	Automatic Revolving Doors

ZEN/ZEN UNI

Opening Sensor for Automatic Sliding Doors

Technology	Radar
Color	⬢ ⬢
Detection Area	
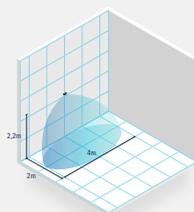
FEATURES

- Unidirectional or bidirectional detection provides a stable and reliable detection zone.
- Detection range adjustable via sensitivity potentiometer for flexible configuration.
- Adjustable radar angle (15°–45° vertically).
- Plug & play operation with simple configuration.
- Supports installation heights up to 4m.

TECHNICAL SPECIFICATIONS

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

APPLICATIONS
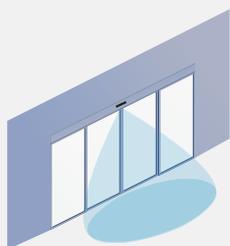
Automatic Sliding Doors

COLIBRI ONE/TWO DRO

Opening Sensor for Automatic Doors

Technology Radar

Color ⬡ ⬡
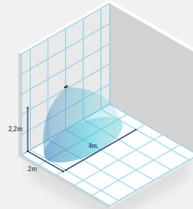
Detection Area

FEATURES

- Available in unidirectional or bidirectional versions.
- Detection zone size adjustable via potentiometer for easy configuration.
- Particularly suitable for compact door installations.
- Compact design with a translucent housing for easy status indication.
- Adjustable antenna angles (vertical 0°–90°, horizontal -30°–+30°) for flexible installation.

TECHNICAL SPECIFICATIONS

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

APPLICATIONS

Automatic Sliding Doors

Automatic Revolving Doors

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GW-1

Opening Sensor for Automatic Sliding Doors

Technology	Radar
Color	⬢
Detection Area	
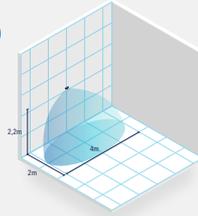
FEATURES

- Detection range adjustable via potentiometer for easy configuration.
- Adjustable radar angle (15° to 45° vertically).
- Max mounting height up to 4m.

TECHNICAL SPECIFICATIONS

Technology	Radar, 24 - 24.25GHz
Detection mode	Motion
Max. detection area	4m (W) × 2m (D)(@2.2m mounting height)
Supply voltage	12V to 24V DC +30%/-10%
Power consumption	< 1W
Temperature range	-20 °C to +55 °C
Dimensions	142mm (L) × 46mm (W) × 45mm (H)
Cable length	2.5m
Mounting height	Up to 4m

APPLICATIONS

Automatic Sliding Doors

MAGIC SWITCH CHROMA

Touchless Opening Sensor for Automatic Doors

Technology	Radar
Color	⬡ ⬡
Detection Area	

0,1m - 0,6m

Scan to discover more

FEATURES

- Touchless door activation with no physical contact, ideal for hygiene-sensitive environments.
- Antimicrobial front panel helps limit the spread of bacteria, fungi, and other microorganisms.
- Customizable LED colors, lighting effects, and audio signals.
- IP65 protection rating for reliable indoor and outdoor use.
- Compatible with all automatic door types, with a max sensing distance of 60cm.
- ADV version includes an external signal input for expanded functions, such as public restroom door lock integration.
- Available in both recessed and surface-mounted versions to meet various installation requirements.

TECHNICAL SPECIFICATIONS

Technology	Radar, 24.150GHz
Detection mode	Motion (bidirectional)
Speed of target	Min. 5Hz or +/- 3cm/s, Max. 200Hz or +/- 1.2m/s
Supply voltage	12V to 24V AC +/- 10% 12V to 24V DC +30% / - 10%
Power consumption	< 1.5W
Mains frequency	50 - 60Hz
Temperature range	-20 °C to +55 °C
Degree of protection	IP65
Mounting height	Up to 4m

APPLICATIONS

Automatic Sliding Doors	Automatic Industrial Doors	Automatic Swing Doors

MAGIC SWITCH BASIC

Touchless Opening Sensor for Automatic Doors
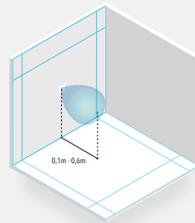
Technology	Radar
Color	
Detection Area	
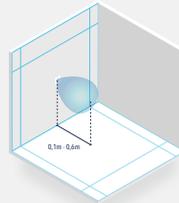
Scan to discover more

FEATURES

- Touchless door opening with no physical contact, ideal for hygiene-sensitive environments.
- Compatible with all automatic door types, with a max sensing distance of 60cm.
- Equipped with an LED indicator for clear status indication.
- Available in both recessed and surface-mounted versions to meet various installation requirements.

TECHNICAL SPECIFICATIONS

Technology	Radar, 24.150GHz
Detection mode	Motion (bidirectional)
Speed of target	Min. 5Hz or +/- 3cm/s, Max. 200Hz or +/- 1.2m/s
Supply voltage	12V to 24V AC +/- 10% 12V to 24V DC +30% / - 10%
Power consumption	< 1.5W
Mains frequency	50 - 60Hz
Temperature range	-20 °C to +55 °C
Degree of protection	IP54
Mounting height	Up to 4m

APPLICATIONS

| Automatic Sliding Doors | Automatic Industrial Doors | Automatic Swing Doors |

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MINI FLY

Compact Opening Sensors for Automatic Doors

Technology   Passive Infrared

Color   ⬢

FEATURES

- Enhanced temperature compensation technology improves pedestrian detection.
- Compact design with mounting heights up to 3.5m.
- Excellent immunity to environmental interference for stable operation.
- Available in both recessed and surface-mounted versions to meet various installation requirements.

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	12V to 24V AC ±10%; 12V to 24V DC -10%/+30%
Power consumption	< 1W
Dimensions	64mm (W) × 41mm (H) × 23mm (D)
Temperature range	-30°C to +55°C
Degree of protection	IP54
Mounting height	Up to 3.5m

APPLICATIONS

Automatic Revolving Doors
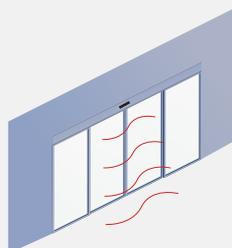
Automatic Sliding Doors

FLY

Compact Opening Sensors for Automatic Doors

| **Technology** | Passive Infrared |
| **Color** | ⬢ |

FEATURES

- Enhanced temperature compensation technology improves pedestrian detection.
- Compact design with mounting height up to 3.5m.
- Available in both recessed and surface-mounted versions to meet various installation requirements.

TECHNICAL SPECIFICATIONS

Technology	Passive infrared
Detection mode	Motion
Tilt angles	-4° to +4°
Detection area	2.5m (W) ×1.5m (D) (Max.); 0.5m (W)×0.5m (D) (Min.) (mounting height of 2.2m)
Supply voltage	12V to 24V AC ±10%; 12V to 24V DC -10%/+30%
Power consumption	< 1W
Dimensions	101mm (W) × 41mm (H) × 27mm (D)
Temperature range	-30°C to +55°C
Degree of protection	IP54
Mounting height	Up to 3m

APPLICATIONS

Automatic Revolving Doors
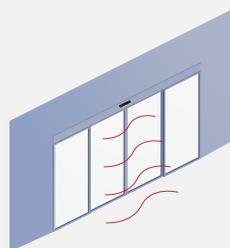
Automatic Sliding Doors

434MHz Wireless Push Plate

Push Plate Switch for Automatic Doors

Technology   Radar

FEATURES

- Elegant design.
- Plug and play.
- 1 set includes 2 wireless push switches and 1 wireless receiver.
- Ideal solution for specific applications where sensors are not suitable.
- Can be installed on the door or on a wall.

TECHNICAL SPECIFICATIONS

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

APPLICATIONS

Automatic Doors

PUSH PLATES

Push Plate Switch for Automatic Doors

Technology   Radar

FEATURES

- Robust and elegant push plates for the activation of all kinds of automatic doors.
- Available in various shapes (round, square, or rectangular) to suit different architectural styles.
- Ideal for use by people with reduced mobility.
- Door activation with a simple press.
- Wired and wireless versions available.
- Sealing gasket enhances water resistance.
- Stainless steel front surface ensures improved durability.

TECHNICAL SPECIFICATIONS

	JAMB	SQUARE	ROUND
Dimensions	38 × 120 × 16mm	120 × 120 × 16mm	152mm Ø × 16mm
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

APPLICATIONS

Automatic Doors

REMOTE CONTROL

Opening Solution for Doors, Garage Doors, Gates, Barriers, etc.

FEATURES

- Robust design suitable for industrial environments.
- Remote control range up to 100m in open areas.
- Each transmitter features a unique code paired with the receiver.
- Delay or non-delay output selectable to suit different application requirements.
- Each receiver can pair up to 100 transmitters, with the ability to delete individual transmitters.
- Receiver equipped with four independent relays.
- 4 transmitter versions available (1, 2, 3, or 4 buttons).
- Red LED indicator on transmitter shows operating status and battery life.
- Optional extended antenna available for the receiver.

TECHNICAL SPECIFICATIONS

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

APPLICATIONS

Automatic Doors

Sensor Solution for Escalators

BEA offers a range of sensors designed for energy-efficient escalator applications. These sensors enable energy-saving activation while enhancing passenger comfort.

Product Series

	CGS-KF112	Activation Sensor Based on FMCW Technology	38
	CGS-MF	Activation Sensor for Energy-saving Escalators and Moving Walkways	39
	CGS-E	Activation Sensor for Energy-saving Escalators	40
	COLIBRI ONE DRO	Activation Sensor for Energy-saving Escalators	41

CGS-KF112

Activation Sensor Based on FMCW Technology

Technology Radar (FMCW)

Color ⬢

FEATURES

- Compact design ideal for escalator activation applications.
- Special wide-area microwave module allows a single sensor to cover an entire escalator entrance.
- Parameters adjustable via remote control to suit different detection requirements.
- IP67 protection rating.
- Selectable Pulse Mode (P) or Trigger Mode (T) outputs for flexible applications.
- 4-pin M12 connector for easy installation and replacement.
- High MTBF (Mean Time Between Failures) ensures extended service life.
- Complies with EN12015 / EN12016 standards.

TECHNICAL SPECIFICATIONS

Supply voltage	FMCW, 24.00GHz to 24.25GHz
Detection mode	Motion
Supply voltage	12V to 24V DC -10%/+30%
Power consumption	< 1.5W
Dimensions	48mm (L) × 43mm (H) × 24mm (W)
Temperature range	-20 °C to +55 °C
Degree of protection	IP67
Cable length	50cm
Accessory	5m / 7m cable with M12 female adapter

APPLICATIONS

Escalator Activation

Pedestrian Walkway Activation

CGS-MF

Activation Sensor for Energy-saving Escalators and Moving Walkways

| Technology | Radar |
| Color | ⬢ |

FEATURES

- Compact IP67-rated design.
- Supports unidirectional detection (approaching or departing) and bidirectional detection of passengers.
- M12 connector for easy integration and replacement.
- Parameters easily adjustable via remote control.
- 3 selectable output configurations: NO (normally open), NC (normally closed), and frequency.
- 2 selectable output modes: Pulse Mode (P) and Trigger Mode (T).

TECHNICAL SPECIFICATIONS

Technology	Radar, 24.150GHz
Detection mode	Motion
Min. detection speed	5cm/s (measured in sensor axis)
Supply voltage	12V to 24V DC +30% / -10%
Power consumption	< 1.5W
Dimensions	40.5mm (L) × 36mm (H) × 36mm (W)
Temperature range	-20 °C to +55 °C
Degree of protection	IP67
Cable length	50cm
Accessory	5m / 7m cable with M12 female adapter

APPLICATIONS

Escalator Activation

Pedestrian Walkway Activation

CGS-E

Activation Sensor for Energy Saving Escalators

Technology   Radar

Color   ⬡ ⬢

FEATURES

- Integrated software filters out mechanical movements inside the escalator while reliably detecting approaching pedestrians.
- Radar technology is resistant to interference from ambient conditions such as light and dust.
- Unidirectional detection reduces false activations.
- Available with normally open (NO) or normally closed (NC) outputs.
- IP65 protection rating suitable for various installation environments.
- Complies with the 47 CFR Part 15 (FCC) standard.
- Maximum detection range up to 5m.

TECHNICAL SPECIFICATIONS

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

APPLICATIONS

Escalator Activation

Pedestrian Walkway Activation

COLIBRI ONE DRO

Activation Sensor for Energy Saving Escalators

Technology	Radar
Color	⬢ ⬢

- Unidirectional version only detects the pedestrian who walks toward the escalator.
- Manual adjustment of the sensitivity by potentiometer.
- Compact design with translucent housing.
- Easy installation, ideal for retrofit projects.
- Adjustable radar angle (vertical 0°–90°, horizontal -30°–+30°) for flexible detection field positioning.

TECHNICAL SPECIFICATIONS

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

APPLICATIONS

Escalator Activation

Pedestrian Walkway Activation

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