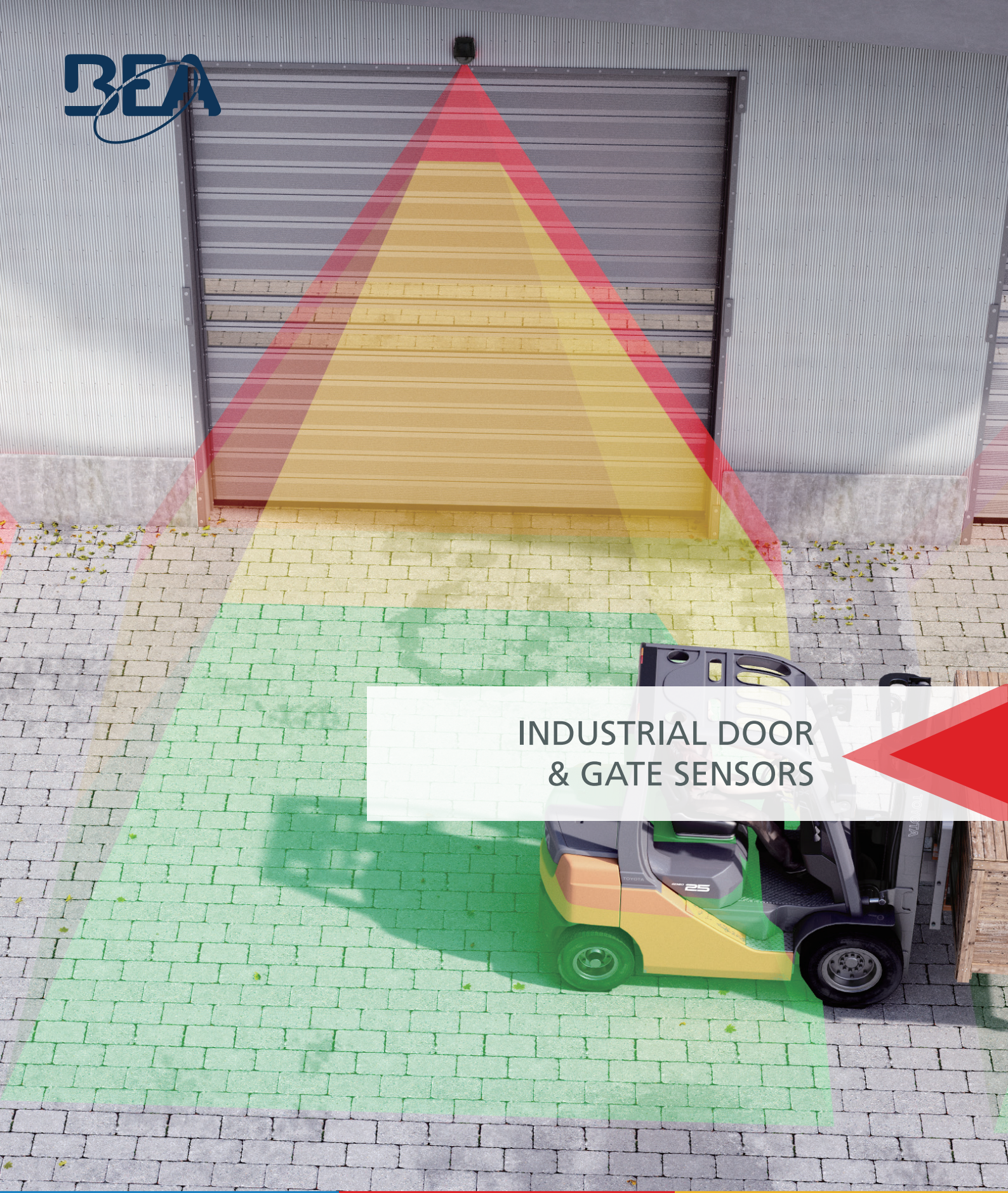
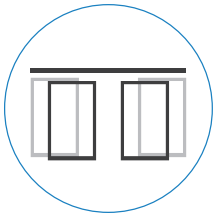


INDUSTRIAL DOOR & GATE SENSORS

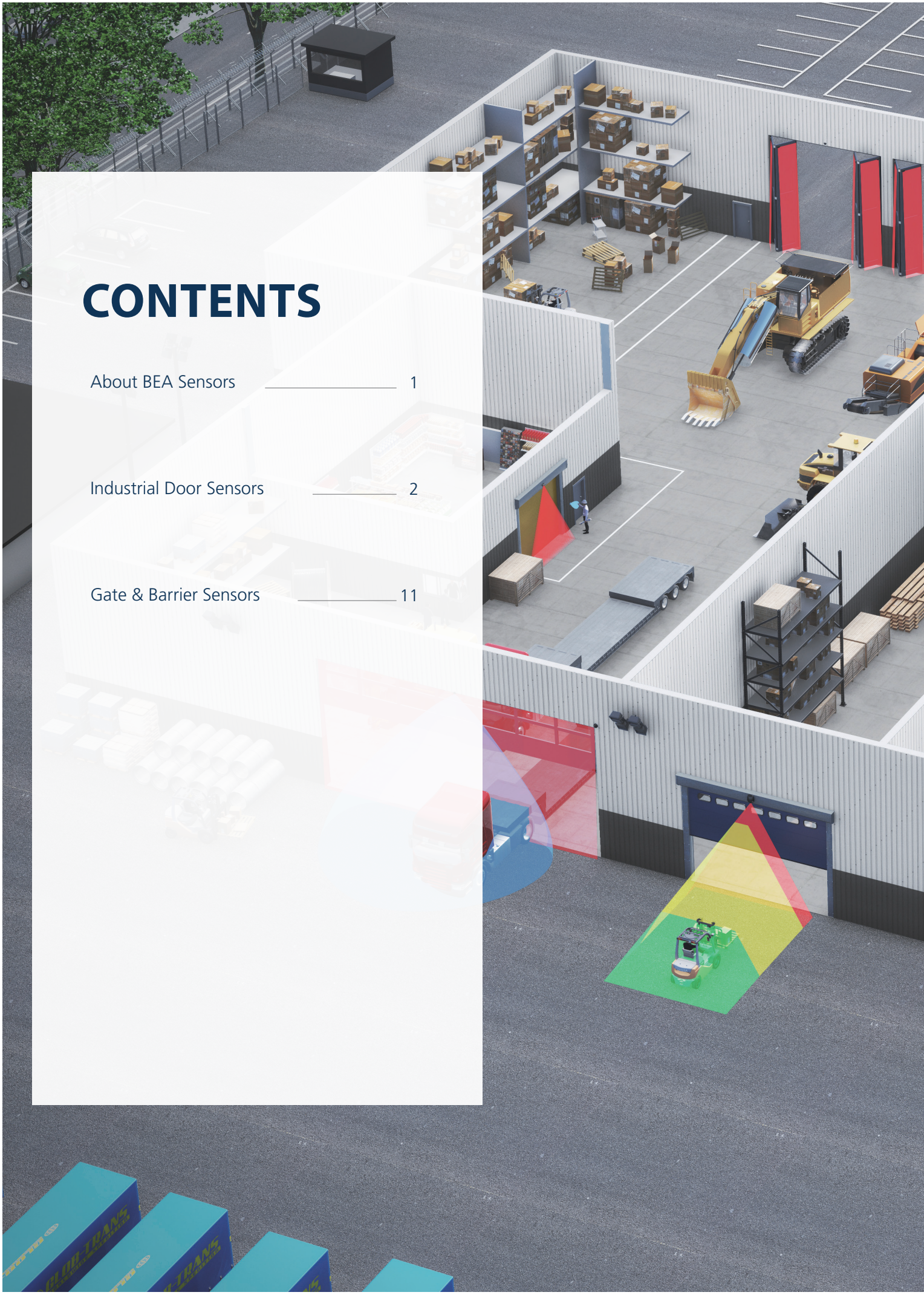
Pedestrian Entrance Sensors



Industrial Door & Gate Sensors

Factory & Logistic Automation Solutions

A **Halma** company



CONTENTS

About

BEA Sensors

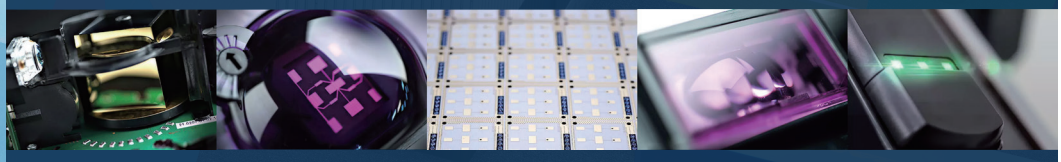
Founded in Belgium in 1965, BEA Sensors is an influential sensor manufacturer for the safety and activation of automated systems including pedestrian and industrial automatic doors, vehicle gates and barriers, transportation systems, security access control, factory and logistics automation.

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



Industrial Door Sensors

Industrial door sensor solution is dedicated to various industrial environments such as manufacturing plants, warehouses, logistics facilities, cold storage, etc. By installing the right sensor, you not only improve traffic flow and comfort for users, but also protect your investment and provide for a safe working environment.
Moreover, our solutions are easy to install and contribute to saving energy.

Sensor Series

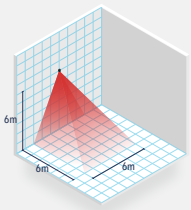
LZR®-WIDESCAN

Opening, Area Surveillance & Safety Sensor for Industrial Doors

Technology Laser (Time of flight)

Color

Detection Area



Scan to discover more

FEATURES

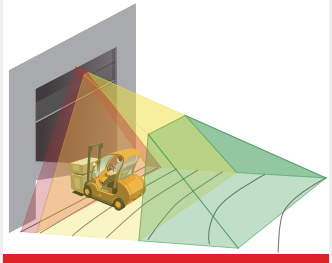
- 7 tilted LASER curtains create a volumetric detection area in front of the door enables accurate distance measurement and offers advantages, such as calculation of object dimensions and trajectory.
- Detects approaching or parked vehicles accurately to prevent any contact with the door.
- Parallel traffic filtering and ignoring pedestrians if desired.
- Independent of ground conditions, allowing for superior functionality in harsh environments.
- Virtual pull cord, speed/height detection to achieve half-open door.
- Save energy: The Thermotool simulated your energy efficiency in just a few clicks to show you how sensing solutions can improve the energy efficiency of your industrial door.
- Easy configuration settings with the LZR®-WIDESCAN mobile app.

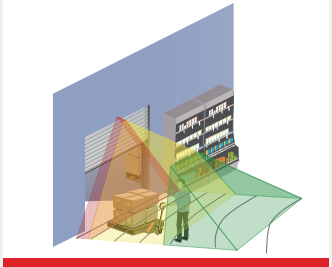
THERMOTOOL
FOR INDUSTRIAL DOORS

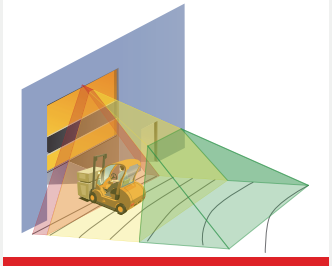
TECHNICAL SPECIFICATIONS

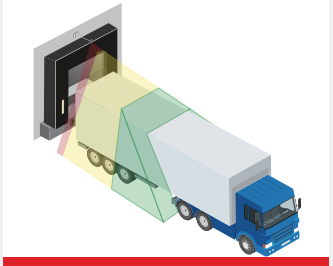
Technology	Laser, Time-of-flight (7 laser curtains)
Detection mode	Motion, presence, height and speed
Supply voltage	12V AC (-10%) - 24V AC (+10%) (50 - 60Hz) ; 12V DC (-10%) - 30V DC @ sensor terminal (Supply current should be max 1.5A)
Tilt angles on bracket	-10° to 5°
Rotation angles on bracket	45° to the right, 15° to the left (lockable)
Power consumption	heating off: < 2.5W, heating auto: typ. < 10W, max. 15W
Dimensions	159mm (H) x 208mm (W) x 127mm (D) (approx.)
Temperature range	-30°C to +60°C
Degree of protection	IP65 (IEC/EN 60529)
Typ. mounting height	2m to 10m

APPLICATIONS


Industrial Sectional Doors


Rolling Shutters


High-Speed Doors


Loading Docks

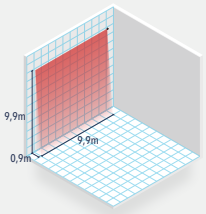
LZR®-I100/-I110

Safety Sensor for Industrial Doors

Technology Laser (Time of flight)

Color

Detection Area



Scan to discover more

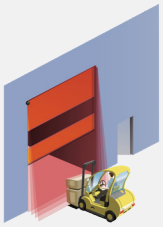
FEATURES

- 4 dynamic orientation laser curtains create a three-dimensional detection area in front of the door to protect safety.
- Variable depth of plane (1m max.) according to the installation height.
- Filters door vibrations and environmental interferences.
- 2 virtual push buttons to open the door.
- Easy installation, ideal replacement of contact edges, light beams and light grids.

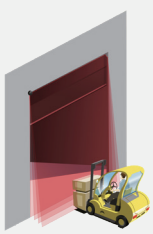
TECHNICAL SPECIFICATIONS

Technology	Laser, Time-of-flight
Detection mode	Presence (EN 12453 Type E)
Supply voltage	10V to 35V DC @ sensor terminal
Rotation angles on bracket	-5° to + 5° (lockable)
Detection area	LZR®-I100: 9.9 m × 9.9 m; LZR®-I110: 5m × 5m
Power consumption	< 5W
Dimensions	125mm (L) × 93mm (D) × 70mm (H)
Temperature range	-30°C to +60°C, if powered; -10°C to +60°C, unpowered
Degree of protection	IP65 (IEC/EN 60529)

APPLICATIONS



Industrial Sectional Doors



Rolling Shutters

Folding Doors

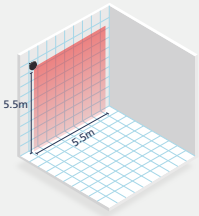
LZR®-FLATSCAN RS305

Compact Laser Scanner

Technology Laser (Time of flight)

Color

Detection Area



Scan to discover more

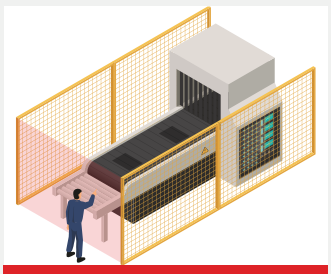
FEATURES

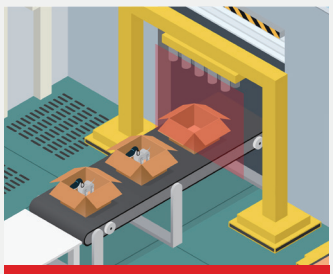
- Full coverage to the hazardous area with high resolution curtain providing full safety protection compared to traditional technologies.
- Provides full monitoring with antimasking and internal monitoring ensuring the protection at all times.
- The compact and slim design with 3 flexible mounting sides (left / right / center) makes it very suitable to install in space-constrained industrial environments.
- Quickly set the detection area via teach-in; it can also self-learn the environment and background to avoid false detection, and any irregular objects in the detection area shall be regarded as background.
- Visible spots and remote control make it easy to align the curtain and adjust parameters.

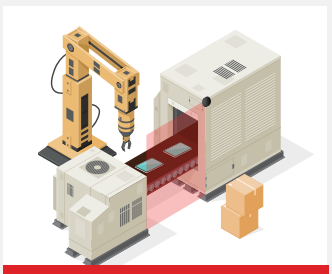
TECHNICAL SPECIFICATIONS

Technology	Laser, Time-of-flight
Detection mode	Presence
Supply voltage	12V - 24V DC ±15%
Detection area	Max 5.5m × 5.5m (4m @ 5% reflectivity)
Power consumption	≤ 2.3W
Dimensions	124mm (L) × 90mm (H) × 50mm (D)
Temperature range	-30°C to +60°C
Degree of protection	IP66 (EN 60529)

APPLICATIONS


Personnel and Object Detection


Process Automation


Area Protection


Overheight Detection

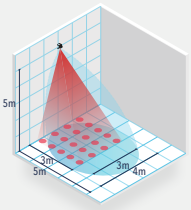
CONDOR

Motion & Presence Sensor for Industrial Doors

Technology Radar & Active Infrared

Color

Detection Area



Scan to discover more

FEATURES

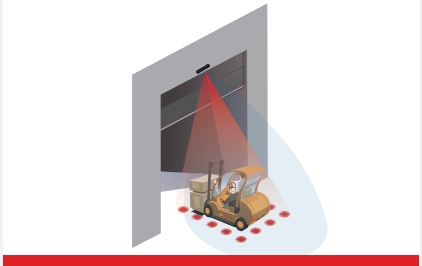
- The presence area is defined to detect every vehicle in front of the door to ensure safety.
- Reduces the risk of collision with the door and increases the lifetime of the door.
- The planar antenna features an accurate pedestrian filtering.
- Filtering cross-traffic to eliminate unwanted detection.
- This detection area allows to decrease the door timer: it offers energy savings proportional to the number of door closing cycles.
- The mounting height of CONDOR up to 6m. For small doors, CONDOR XL is available with a mounting height of 3.5m.

TECHNICAL SPECIFICATIONS

Technology	Radar & Active Infrared
Detection mode	Motion & Presence
Supply voltage	12V - 24V AC ±10%; 12V - 24V DC +10% / -3%
Detection area	
CONDOR	4m × 5m (Microwave) 4m × 4m (Active Infrared)
CONDOR XL	4m × 2m (Microwave) 4m × 4m (Active Infrared)*
Power consumption	< 3.5W / VA
Dimensions	127mm (L) × 102mm (H) × 96mm (W)
Temperature range	-30°C to +60°C
Degree of protection	IP65 (IEC/EN 60529)
Mounting height	CONDOR: 3.5m - 6m; CONDOR XL: 2m - 3.5m

* Zone detected by spotfinder, slightly bigger than actual detection field.

APPLICATIONS



Industrial Sectional Doors

Rolling Shutters

High-Speed Doors

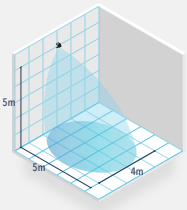
FALCON

Opening Sensor for Industrial Doors

Technology Radar

Color

Detection Area



Scan to discover more

FEATURES

- A precise opening detection with the capability to filter pedestrians and parallel cross traffic.
- Unidirectional motion detection for an optimum door closing cycle generating energy savings.
- Filtering people and detecting vehicles only if needed.
- Possibility of filtering cross-traffic to eliminate unwanted detection.
- Immunity and stability thanks to the BEA Sensors planar antenna and the digital treatment of the signal.
- Adjustment of basic functions with push buttons or remote control.
- The mounting height of FALCON up to 7m. For small doors, FALCON XL is available with a mounting height of 3.5m.

TECHNICAL SPECIFICATIONS

Technology	Radar
Detection mode	Motion
Supply voltage	12V - 24V AC ±10% 12V - 24V DC -10% / +30%
Detection area	FALCON: 4m × 5m ; FALCON XL: 4m × 2m (typical at 30° and field size 9)
Power consumption	< 2W
Dimensions	127mm (W) × 102mm (H) × 96mm (D)
Temperature range	-30°C to +60°C
Degree of protection	IP65 (IEC/EN 60529)
Mounting height	FALCON: 3.5m - 7m; FALCON XL: 2m - 3.5m

APPLICATIONS

Industrial Sectional Doors

Rolling Shutters

High-Speed Doors

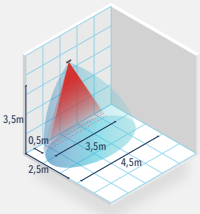
IXIO-D INDUS

Opening & Presence Sensor for Industrial Doors

Technology Radar & Active Infrared

Color

Detection Area



ARTEK INSIDE

Scan to discover more

FEATURES

- Combines two technologies – radar and infrared – to achieve a double goal: opening and protection.
- The radar monitors a large, adjustable area which makes it ideal for opening and re-opening the industrial doors.
- Unidirectional sensor which enables the door to close sooner improving energy efficiency.
- 48 high-density infrared spotlights from 2 curtains protect pedestrians and vehicles from any contact with the doors.
- A 32-bit microprocessor optimizes the processing of information from the surrounding area, providing sustainable performance and stability regardless of background changes.
- 4 visible spots for simplified setup of the safety curtain.
- Intuitive setup via the LCD screen and/or BEA Sonsors remote control.

TECHNICAL SPECIFICATIONS

Technology	Radar & Active Infrared
Detection mode	Motion & Presence
Supply voltage	12V - 24V AC ±10% 12V - 30V DC ±10%
Detection area	4.5m × 2.5m (Microwave) , 3.5m × 0.5m (infrared)
Power consumption	< 1.5W
Dimensions	269.3mm (L) × 57.3mm (H) × 57.9mm (W)
Temperature range	-25°C to +55°C
Degree of protection	IP54 (IEC/EN 60529)
Mounting height	2m to 4m

APPLICATIONS

Industrial Sectional Doors

Rolling Shutters

High-Speed Doors

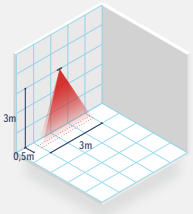
IXIO-S INDUS

Presence Sensor for Industrial Doors

Technology Active Infrared

Color

Detection Area



Scan to discover more

FEATURES

- An active infrared presence sensor.
- 48 high-density infrared spotlights from 2 curtains protect pedestrians and vehicles from any contact with the doors.
- A 32-bit microprocessor optimizes the processing of information from the surrounding area, providing sustainable performance and stability regardless of background changes.
- 10m cable, max. installation height of 4m, reliable detection in difficult environments.
- 4 visible spots for simplified setup of the safety curtain.
- Intuitive setup via the LCD screen and/or BEA Sonsors remote control.

TECHNICAL SPECIFICATIONS

Technology	Active Infrared
Detection mode	Presence
Supply voltage	12V - 24V AC ±10 % 12V - 30V DC ±10 %
Power consumption	< 1.5W
Dimensions	62mm (L) x 55mm (H) x 44mm (W)
Temperature range	-25°C to +55°C
Degree of protection	IP54 (IEC/EN 60529)
Mounting height	2m to 4m

APPLICATIONS

Industrial Sectional Doors

Rolling Shutters

High-Speed Doors

INDUSTRIAL REMOTE CONTROL

Handy, Practical and Efficient Solution to Open Industrial Doors, Garage Doors, Gates, Barrier.

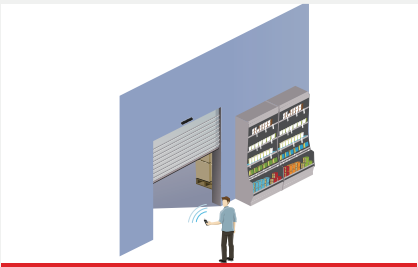
FEATURES

- Robust, industrial environment suitable design.
- Control distance is up to 100m 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.

TECHNICAL SPECIFICATIONS

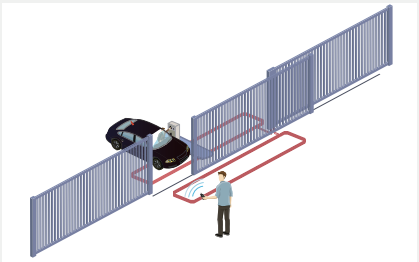
Technology	433MHz
Detection mode	≤ 7dBm (Transmitter)
Current Consumption	32mA (Transmitter) 40mA (Receiver)
Contact range	1.0A @ 30V DC
Supply voltage	3V DC (CR 2032 3V battery*2) 50,000 cycles (Transmitter) 9V to 30V DC/AC (Receiver)
Max No. of programmed units per receiver	100 Transmitters
Temperature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

APPLICATIONS

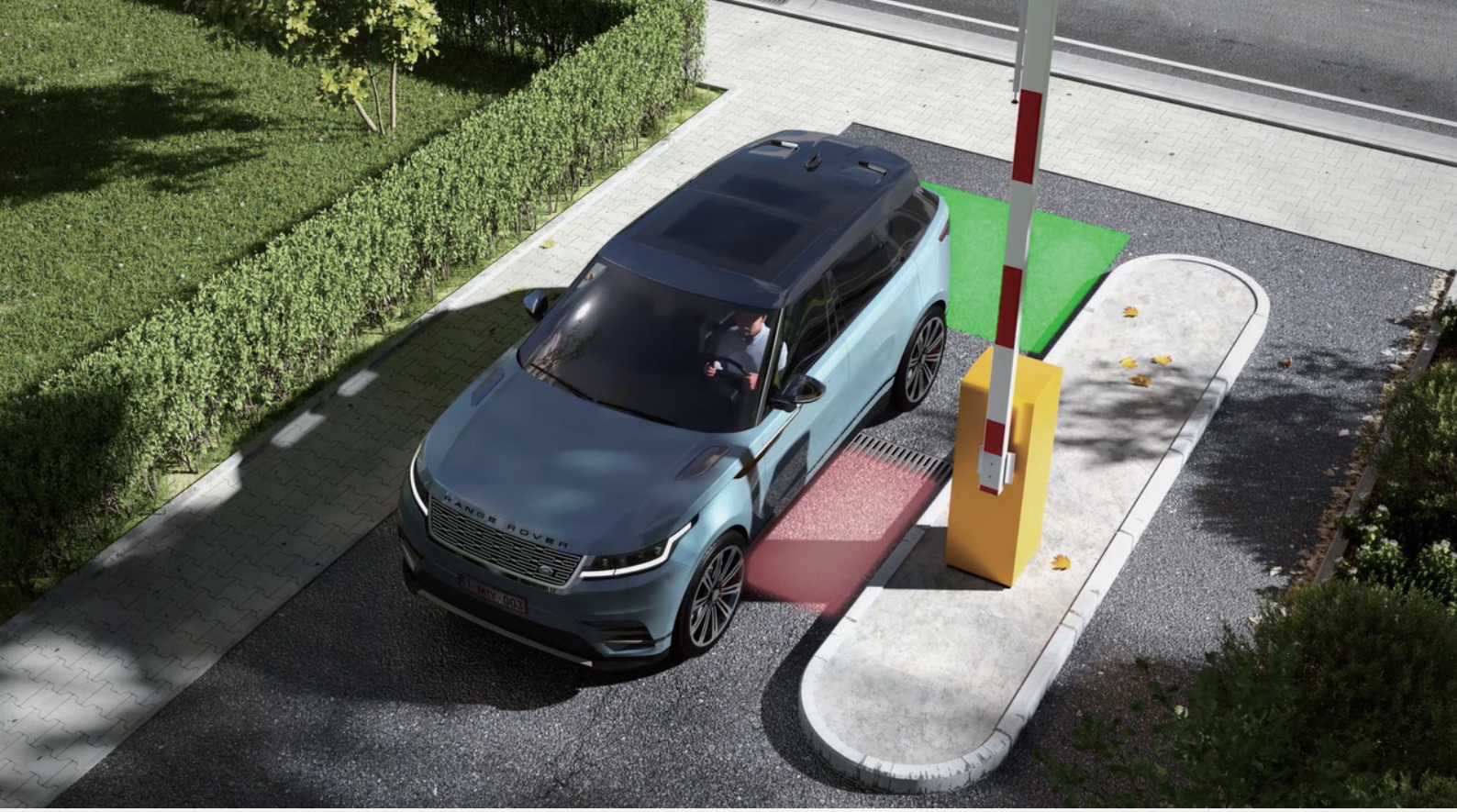


Industrial Doors

Parking Barriers



Gates



Gate & Barrier Sensors

Gate and barrier sensors provide access control for a wide range of buildings, such as car parks, sports facilities, warehouses, airports, and storage areas, etc. By installing the right sensor, rapid and safe opening and closing of barriers can be achieved, ensuring efficient vehicle passage while effectively preventing accidental collisions with vehicles, pedestrians, or objects during the barrier closing process.

Sensor Series

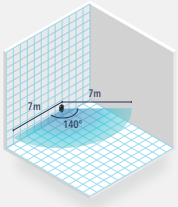
EVOLOOP

Activation, Presence & Protection Sensor for Barriers

Technology MoWa Inside

Color

Detection Area



Scan to discover more

FEATURES

- Not only trigger opening and closing of the barrier, but also activate ticketing and license plate recognition systems.
- Plug & go, no more dusty road works with noisy and heavy equipment. Ideal replacement of induction loops and photocells.
- Filtering pedestrians or vehicles.
- Protect safety of both vehicles and pedestrians.
- Configure up 3 virtual loops independently among the 140° field of view.
- Easily connect and set up via mobile app.
- Reliable and resistant in all environments and conditions.

TECHNICAL SPECIFICATIONS

Technology	FMCW, MoWa Inside
Detection mode	Motion & Presence
Supply voltage	12V - 30V DC ±10% 12V - 24V AC ±10%
Detection field	Max. 7m
Power consumption	< 3W
Dimensions	50mm (D) × 150mm (H) × 68mm (W)
Temperature range	-25°C to +55°C
Degree of protection	IP65 (IEC/EN 60529)

APPLICATIONS

Parking Barriers

Access Control

Toll Gates

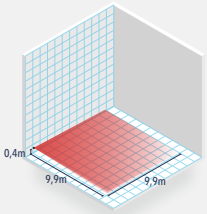
LZR®-H100

Opening & Safety Sensor for Barriers

Technology Laser (Time of flight)

Color

Detection Area



Scan to discover more

FEATURES

- 4 horizontal laser curtains to open, secure and/or detect a presence for rising barriers.
- Protects vehicles and people that are present in the safety field from contact with the boom (installation with reference point).
- Pedestrians and parallel traffic in the opening field are screened.
- Installer-friendly, clean and time-saving without any road works, easily define the detection fields.
- Offers great flexibility in defining the width and depth of the detection zones (max detection field of 9.9m x 9.9m).
- Meets the highest-level of safety standards: EN 12453 / Type E; EN 60261 (SIL 2); EN ISO 13849 (Pl'd').

TECHNICAL SPECIFICATIONS

Technology	Laser, Time-of-flight
Detection mode	Motion & Presence
Supply voltage	10V - 35V DC
Detection area	9.9m × 9.9m
Power consumption	< 5W
Dimensions	125mm (L) × 93mm (D) × 70mm (H)
Temperature range	-30°C to +60°C if powered; -10°C to +60°C unpowered
Degree of protection	IP65 (IEC/EN 60529)

APPLICATIONS

Parking Barriers

Access Control

Toll Gates

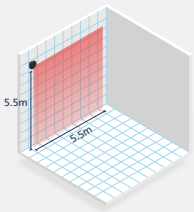
LZR®-FLATSCAN VS305

Compact Laser Scanner

Technology Laser (Time of flight)

Color

Detection Area



Scan to discover more

FEATURES

- For vehicle separation and vehicle anti-tailgating via the detection of vehicles passing through entrances and exit barriers.
- Aesthetic, flat and compact design, laser technology to detect vehicles as a perfect replacement of light curtains and loops.
- Robust design, suitable for outdoor installation.
- Easy to define the detection field with a teach-in.
- Outstanding on the fast response time and the high angular resolution.
- High immunity to environment disturbances (such as sunshine, rain, snow, plenty of water, etc.) and impure background.

TECHNICAL SPECIFICATIONS

Technology	Laser, Time-of-flight
Detection mode	Presence
Supply voltage	12V - 24V DC ±15%
Detection area	Max 5.5 × 5.5m (4m @ 5% reflectivity)
Power consumption	≤ 2.3W
Dimensions	124mm (L) × 90mm (H) × 50mm (D)
Temperature range	-30°C to +60°C if powered; -10°C to +60°C unpowered
Cable length	10m

APPLICATIONS

Parking Barriers

Access Control

Toll Gates

MATRIX

Induction Loop Controller

Technology Induction Loop

Scan to discover more

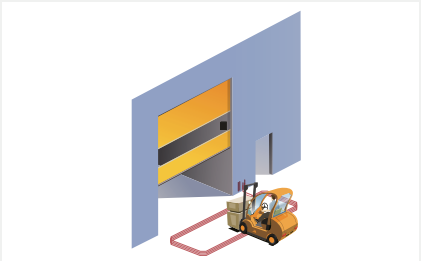
FEATURES

- 4 frequency adjustments to avoid all interferences.
- Define the motion direction on 2-channel loop controllers.
- ASB function used to make the loop sensitive to raised floor vehicles, trail tillers or fork-lifts.
- Accurate detection parameter adjustment with a guarantee of stability in the long term.

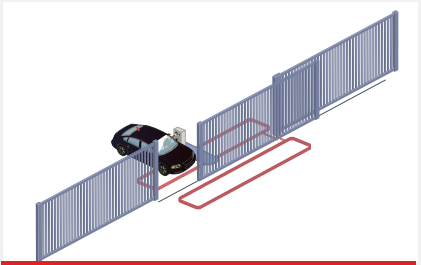
TECHNICAL SPECIFICATIONS

Technology	Induction Loop
Detection mode	Presence
Presence time	1min to infinity
Supply voltage	MATRIX S&D 12-24: 12V - 24V AC/DC ±10% MATRIX S&D 220: 230V AC ±10%
Power consumption	≤ 2.5W
Dimensions	77mm (W) × 40mm (H) × 75mm (D)
Temperature range	-30°C to +40°C if powered; -30°C to +70°C unpowered
Degree of protection	IP40

APPLICATIONS


Industrial Doors


Parking Barriers


Gates

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