WHERE TO FIND OUR SOLUTIONS

WAREHOUSE
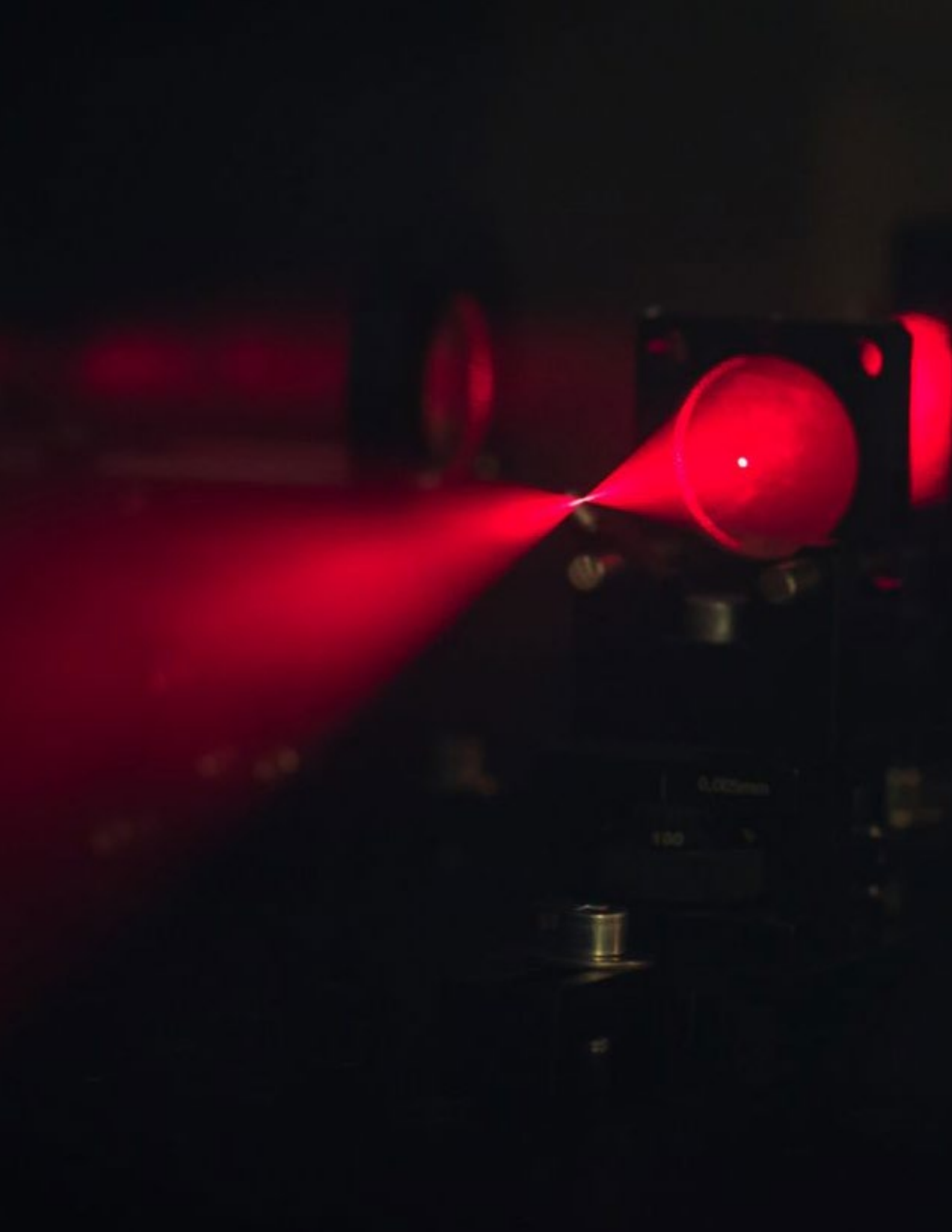
TECHNOLOGIES
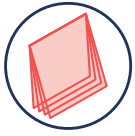
LASER

**Laser** technology works according to the principle of Time-of-Flight. The sensor sends an intense light impulse in a defined direction and measures the time until the signal returns. As the speed of light is a constant value (approximately 300,000 km/s), this time is directly proportional to the distance between the sensor and the first object encountered by the light impulse.

As a result, and by sending multiple beams in multiple directions (2D or 3D), the sensor is capable of knowing the exact position of any object in its detection area at any given time.
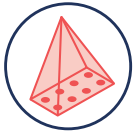
ACTIVE INFRARED WITH BACKGROUND ANALYSIS

Active infrared with background analysis technology works with a background (e.g. a sensor shines infrared light on the floor). In this case, the sensor lights up one or more areas and analyzes the energy that returns. Detection is triggered if there is any significant difference when compared to the original picture.

ACTIVE INFRARED WITH BACKGROUND SUPPRESSION

Active infrared with background suppression technology works on the principle of "triangulation" in which the sensor calculates the distance between the emitter and receiver. The emission angle is already known and the reflection angle becomes the key element as the distance to the object can be calculated according to the position of the reflected spot on the receiver side (a triangle can be drawn when you know one distance and two angles).
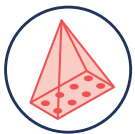
PASSIVE INFRARED

Passive infrared technology measures the infrared light radiating from objects in its field of view. Motion or presence is detected when an infrared source with one temperature, such as a human being, passes in front of an infrared source with another temperature, such as the normal environment.

RADAR

Radar technology, also known as microwave technology, is based on the Doppler Effect: the radar sensor continuously emits microwaves with a certain frequency in a defined area. These microwaves are reflected back to the sensor by all of the objects present in its environment.

PIEZO

Piezo technology, also known as piezoelectric, is the process of converting mechanical pressure (pushing a button) into electrical energy. A piezo switch is paired with a field effect transistor (FET) that, when pushed, allows current to flow through the FET.

CAPACITIVE

Capacitive technology detects close-range electrically charged objects. A small voltage is applied to a conductive surface, resulting in a uniform electrostatic detection field. When a conductor, such as the human hand, enters this field, detection occurs.

RADIO CONTROL FREQUENCY

Radio control frequency wireless technology uses transmitters and receivers operating on specific radio frequencies. The transmitter applies a radio frequency alternating current to an antenna, which then radiates radio waves. The receiver receives the transmitted frequency and converts the information into a usable form.

VIDEO

Video technology uses optics and light to create pictures and videos. Enhanced definition cameras capture door environment and traffic usage in full color and high quality. Cameras are used within sensors to increase security and decrease liability.

6 LZR®-S600

IS40 / XL 7

5 LZR®-I30

900 MHZ SERIES 9

CHALLENGES TO MEET

Safety Hazards

Energy Conservation

Streamline Traffic

1 FALCON FAMILY

3 LZR®-H100

4 LZR®-FLATSCAN SW

8 ULTIMO

2 LZR®-WIDESCAN

BEA SENSING SOLUTIONS

MICROWAVE SENSORS

FALCON FAMILY

**MOTION SENSORS WITH CROSS-TRAFFIC AND PEDESTRIAN REJECTION**

- Adjustable detection zones
- Mounting heights from 6 ½ to 23 feet (based on model)
- Six modes of detection filtering for pedestrian and parallel traffic rejection
- IP65 rated enclosure for harsh environments
- Available with 11lb, UL listed explosion-proof housing

SPARROW

VARIABLE MOUNT INDUSTRIAL MOTION SENSOR

- Adjustable detection zones
- Mounting heights from 6 ½ to 20 feet
- Ten sensor sensitivity settings can be applied to optimize detection
- Immunity settings can be adjusted to reduce unwanted detections caused by rain, snow and head vibrations
- IP65 rated enclosure for harsh environments
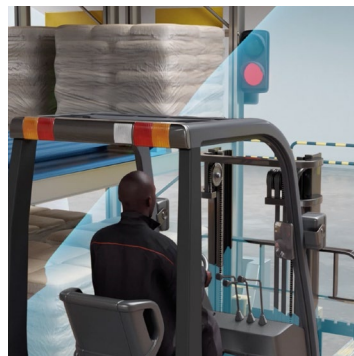
COLIBRI

UNIDIRECTIONAL MOTION SENSOR FOR OFF-DOOR APPLICATIONS

- Pairs well with LED Signal Lights for warning indication applications
- Mounting heights from 6 to 10 feet
- Variable sensitivity adjustment provide different detection areas
- Lateral angle adjustment for ceiling, wall and low level mount versatility
- Compact size provides flexibility in mounting

ACCESSORIES

MS09
MICROWAVE TOUCHLESS ACTUATOR

- IP65 rated enclosure ideal for harsh environments
- Detection zone from 4 to 24 inches

MS41
STAINLESS STEEL, TOUCHLESS ACTUATOR

- IP55 rated enclosure ideal for harsh environments
- Detection zone from 2 to 24 inches

MS31
MICROWAVE TOUCHLESS ACTUATOR

- Touchless design reduces the spread of germs and bacteria
- Detection zone from 4 to 24 inches

LASER-BASED SENSORS

LZR®-WIDESCAN

**MOTION, PRESENCE & SAFETY SENSOR
FOR INDUSTRIAL DOORS**

- Utilize mobile app to easily configure sensor settings (available on the Apple App Store & Google Play Store)
- Virtual pull-cord function can differentiate between pedestrian and vehicle traffic and can provide pulse-on-stop activation
- Two visible LASER alignment spots ensure accurate pattern placement

LZR®-H100

**LASER SCANNER FOR
GATE & BARRIER APPLICATIONS**

- Two relays allow for activation via motion or presence
- Effective alternative to loop detectors
- Time-of-Flight presence-based opto-electronic sensor ensures accurate and immediate detection
- Ability to detect vehicle trajectory during approach and departure
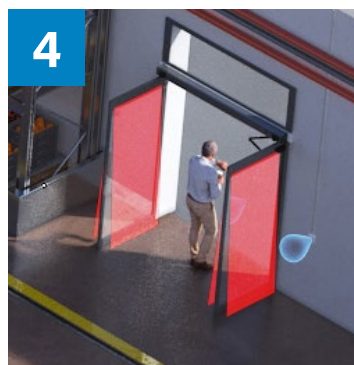
LZR®-FLATSCAN SW

**STANDALONE, DOOR MOUNTED SWING
DOOR SAFETY SYSTEM**

- Ideal for low energy applications
- Leading edge safety extends the detection area beyond the leading edge of the door for enhanced safety
- Fully monitored internally, capable of external monitoring
- Hub-less system offers fewer components for easier setup and installation

LZR®-I30

LASER SCANNER FOR INDUSTRIAL AUTOMATION

- Four curtains of detection capable of 30 × 30 feet
- Detects objects as small as 2 inches at 30 feet away, depending on application
- Ability to ignore dynamic ground conditions and extreme weather

LZR®-S600

**LASER SCANNER FOR
BUILDING AUTOMATION AND SECURITY**

- Maximum detection range of 82 x 82 feet
- High immunity to environmental interferences
- Ability to ignore dynamic ground conditions and extreme weather

BEA SENSING SOLUTIONS

INFRARED SENSORS

IS40P

PRESENCE SENSOR IDEAL WITH VIRTUAL LOOP FUNCTIONALITY

- Nine unique infrared patterns capable of highly flexible presence detection in any industrial environment
- Six modes of detection filtering are available for microwave immunity, as well as pedestrian and parallel traffic rejection
- Adjustable infrared immunity modes mitigate environmental disturbances such as subtle door vibrations, light, sun, rain and snow
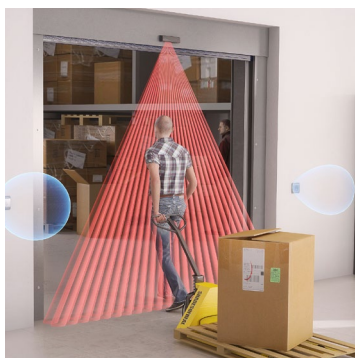
IXIO-ST INDUSTRIAL

PRESENCE SENSOR FOR SMALL INTERIOR INDUSTRIAL DOORS

- Two 24-spot, high-density, infrared safety curtains providing precise presence detection
- Four visible red alignment spots are projected on the ground to assist in precise IR curtain adjustment
- Intelligent programming and troubleshooting via a menu-driven LCD
- On board microprocessor optimizes data analysis, monitors sensor performance and enables system integration

DUAL TECHNOLOGY SENSORS
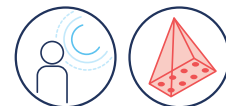
IS40 / XL

MOTION & PRESENCE SENSOR FAMILY FOR INDUSTRIAL DOORS

- Bidirectional, unidirectional approach and unidirectional depart microwave detection options
- Six modes of detection filtering are available for microwave immunity, as well as pedestrian and parallel traffic rejection
- Adjustable infrared immunity modes mitigate environmental disturbances such as subtle door vibrations, light, sun, rain and snow

ULTIMO

AUTOMATIC SLIDING DOOR SENSOR WITH EXTENDED / ENHANCED SAFETY

- Three infrared curtains, each with 32 independent detection spots, offer deeper and broader safety coverage
- Four visible red alignment spots are projected onto the ground, verifying the location of the infrared curtains and helping to increase the accuracy of setup.
- Easily define the microwave pattern shape, adjust the infrared curtain width and review troubleshooting diagnostics via a menu-driven LCD
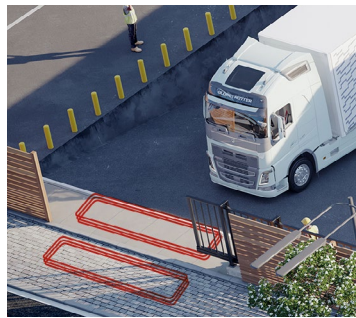
RADIO CONTROLS

900 MHZ SERIES
WIRELESS TRANSMITTERS AND RECEIVER

- Connects up to 500 feet (open-air transmission)
- DIP switch function settings and push button learn modes
- 1, 2, 3 and 4 button hand-held transmitters, plus an in-wall transmitter
- IP65 rated handheld transmitters available
- BEA also offers 433 MHz & 300 MHz frequencies

MODULES

MATRIX LOOP DETECTORS
UL LISTED LOOP DETECTORS

- Available in operating powers of 110 to 120 VAC and 12 to 24 VAC / VDC
- Automatic sensitivity boost
- Settings are adjusted via two easy-to-use potentiometers
- Pulse-on-entry and pulse-on-exit presence detection

BR3-X
PROGRAMMABLE 3-RELAY LOGIC MODULES

- 13 Function universal modules for a variety of application needs, such as time delay, 3-relay sequencing and more

BR2-900
2-RELAY LOGIC MODULE + 900 MHZ

- 2-relay logic module with built-in 900 MHz wireless technology and day / night mode functionality

ACCESSORIES

LED SIGNAL LIGHTS
- UL Listed, IP67 Models Available
- Stackable, Column and Traffic Styles Available

ACCESS CONTROL
- UL Listed GATELOCKS
- Universal IP66 Rated Keypad
- KEYSWITCHES

INSTALLATION ACCESSORIES
- UL Listed Power Supplies
- L & Z Brackets
- Industrial Extension Brackets
- BEA Universal Remote Control

BEA SENSING SOLUTIONS

KEEP IN TOUCH

BEA AMERICAS

RIDC Park West
100 Enterprise Drive
Pittsburgh, PA 15275-1213

800 523 2462   info-us@BEAsensors.com

BEA

BEAsensors.com