

# INDUSTRIAL AUTOMATION SOLUTIONS

SENSING TECHNOLOGY THAT IMPROVES  
AUTOMATION & SAFETY OF PEOPLE AND  
OBJECTS IN INDUSTRIAL ENVIRONMENTS





# TECHNOLOGIES



**MICROWAVE** technology operates on the principal of the Doppler effect. K-Band (radar) microwaves are transmitted at a specific frequency and the returning signals are analyzed for changes in that frequency. An object moving towards a microwave sensor results in an increase in frequency while an object moving away from a microwave sensor results in a decrease in frequency, allowing directionally to be determined. Microwave sensors are used for activation via motion.



**ACTIVE INFRARED** technology uses light in focused, diffused and triangulation configurations. Invisible radiant energy is emitted against a reference background that reflects the energy back to the sensor. The reflected energy is then compared to the reference background to determine reflectivity changes. An object within the detection zone results in a different (increase or decrease) reflectivity. Active infrared sensors are used for activation and safety via motion and presence.

**PASSIVE INFRARED** technology uses heat signatures. Instead of emitting energy like an active infrared sensor, a PIR simply waits for a heat source to enter the detection zone. The human body releases heat that can be viewed as infrared light. Passive infrared sensors are used for activation via presence.



**CAMERA** 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.



**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. Capacitive sensors are used for activation via presence.



**LASER** technology operates on the principle of time-of-flight. The sensor emits light and calculates how long it takes the light to return to the sensor. The calculated time is then converted into a distance. This allows the sensor to precisely detect the location of objects and provides extremely accurate detection patterns. Laser sensors are used for activation and safety via motion or presence.



**RADIO CONTROL FREQUENCY** 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. Radio transmitters and receivers are used for activation.



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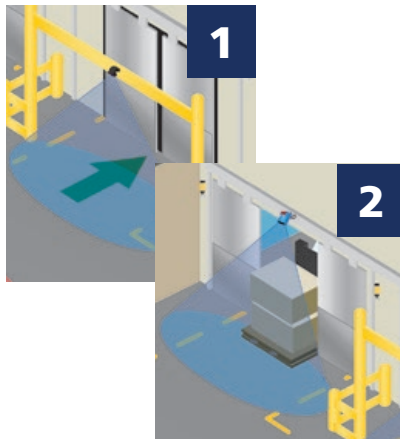
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**GATELOCKS**

WEATHER-RESISTANT  
ELECTROMAGNETIC LOCK



# MICROWAVE SENSORS



## FALCON FAMILY

### MOTION SENSOR WITH CROSS-TRAFFIC AND PEDESTRIAN REJECTION

- Adjustable detection zones
- Mounting height from 6.5 to 23 feet
- Six modes of detection filtering for microwave immunity, including pedestrian and cross-traffic rejection
- NEMA 4 rated enclosure for harsh environments
- Available with 10 lb, UL listed explosion-proof housing



## SPARROW

### HIGHLY FLEXIBLE MOTION SENSOR

- Adjustable detection zones
- Mounting height from 6.5 to 20 feet
- Microwave antenna can be rotated 180° to create different sensing fields
- Can be used for request-to-exit, off-door and industrial applications
- IP64 rated enclosure for harsh environments



## COLIBRI

### OFF-DOOR UNIDIRECTIONAL MOTION SENSOR

- Ideal for configuration with LED Signal Lights for warning indication applications
- Mounting height from 6 to 10 feet
- Can detect traffic moving as slow as 2 in/sec

## ACCESSORIES



### MS08

- Touchless design reduces the spread of germs and bacteria
- Offers a detection range of 4 to 24 inches

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### MS09

- Surface mounted, NEMA 4 rated enclosure ideal for harsh environments
- Offers a detection range of 4 to 24 inches

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### MS11

- Stainless steel faceplate with illuminated center
- NEMA 4 rated enclosure
- Offers a detection range of 2 to 24 inches

# INFRARED SENSORS



## IS40P

### PRESENCE SENSOR IDEAL FOR VEHICLE DETECTION

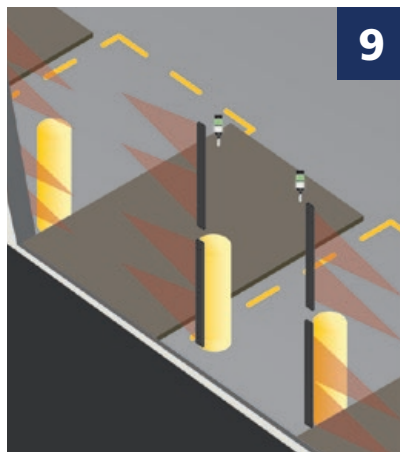
- Mounting height from 6.5 to 16 feet
- Utilizes 40 active infrared spots for presence detection
- Nine infrared patterns are available for user configuration
- NEMA 4 rated enclosure for harsh environments
- Adjustable learn-time from 30 seconds to infinity (no learn)



## IXIO-ST INDUSTRIAL

### SAFETY SENSOR FOR SMALL INTERIOR INDUSTRIAL DOORS

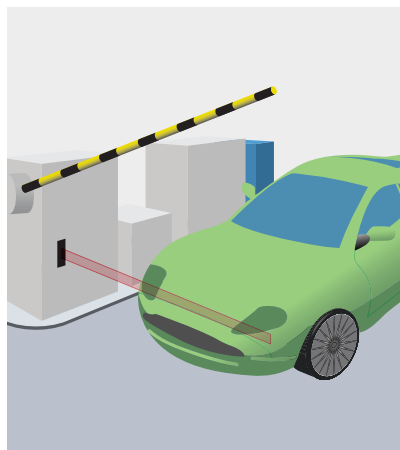
- UL Listed, IP54 rated overhead presence sensor
- Two rows of 24 spots provide dense infrared presence curtains for precise presence detection
- Four visible alignment spots available for precise IR curtain adjustment
- Easy installation and troubleshooting with menu-driven LCD
- Mounting height from 6.5 to 11.5 feet



## SUPERSCAN INDUSTRIAL

### PRESENCE SENSOR FOR INDUSTRIAL AUTOMATION AND GATE APPLICATIONS

- Detection zone of 2.5 to 11.5 feet
- Can be mounted horizontally or vertically providing versatility
- Can be used as an individual module or daisy chained with up to 7 slave modules
- Housing available up to 102 inches in length; can be field cut to desired length

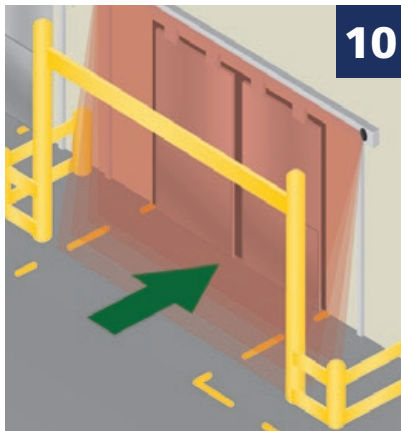


## FOCUS FAMILY

### VERSATILE, COMPACT PRESENCE SENSOR

- Ideal for barrier arm, gate and other pass-thru applications
- Low-profile, recessed-mount Focus 2 and Smart Focus
- Detection distance of 24 to 98 inches

# LASER BASED SENSORS

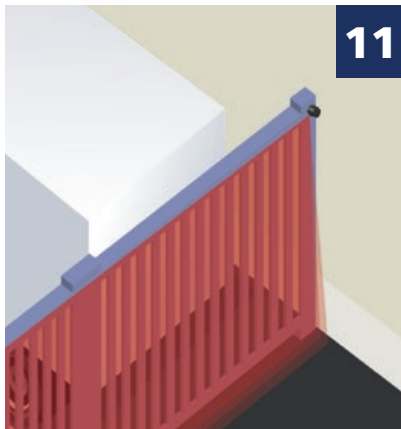


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## LZR-I30

### LASER SCANNER FOR INDUSTRIAL DOOR AND GATE SAFETY

- Time-of-flight technology ensures accurate object detection within a three dimensional safety zone
- Four curtains of detection capable of 30 feet x 30 feet
- Has the ability to ignore dynamic ground conditions and extreme weather
- NEMA 4 rated enclosure ideal for harsh environments



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## LZR-S600

### LASER SCANNER FOR BUILDING AUTOMATION AND SECURITY

- Time-of-flight technology ensures accurate object detection within a three dimensional safety zone
- Four curtains of detection capable of 82 feet x 82 feet
- Has the ability to ignore dynamic ground conditions and extreme weather
- Ideal for perimeter protection applications requiring a large detection field
- NEMA 4 rated enclosure ideal for harsh environments

# DUAL TECHNOLOGY SENSORS

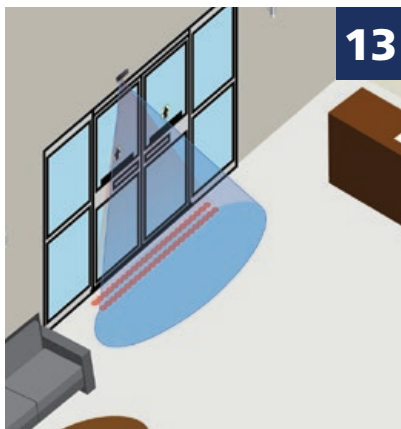


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## IS40 / XL

### MOTION AND PRESENCE DETECTION FOR INDUSTRIAL APPLICATIONS

- Combines overhead motion detection with 40 spots of infrared presence detection
- Six modes of detection filtering for microwave immunity, including pedestrian and cross traffic rejection
- Nine unique infrared patterns capable of highly flexible presence detection
- NEMA 4 rated enclosure for harsh environments



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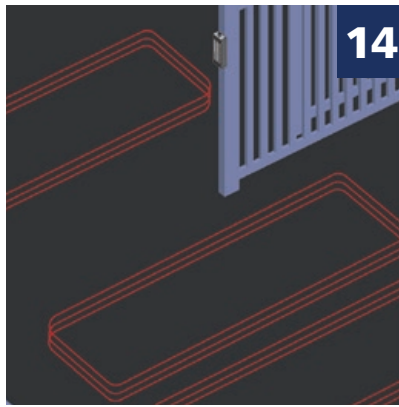
## IXIO-DT1 INDUSTRIAL

### MOTION AND PRESENCE SENSOR FOR SMALL INTERIOR INDUSTRIAL DOORS

- UL Listed, IP54 rated overhead dual technology sensor
- Two rows of 24 spots provide dense infrared presence curtains for precise presence detection
- Ten microwave activation sensitivity settings
- Easy installation and troubleshooting with menu-driven LCD
- Mounting height from 6.5 to 14 feet



## MODULES

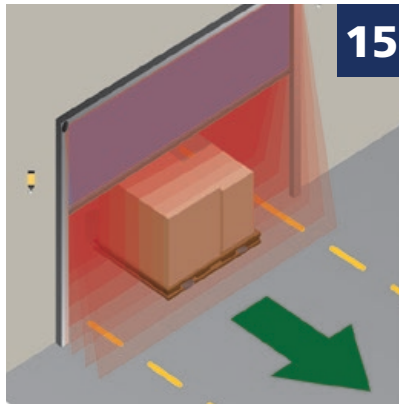


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### MATRIX LOOP DETECTORS

#### UL LISTED SINGLE AND DUAL LOOP DETECTORS

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



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### BR3

#### PROGRAMMABLE 3-RELAY LOGIC MODULE

- 12 function universal module for a variety of other application needs, such as time delay, 3-relay sequencing and more
- 3 relays including WET and DRY
- Can be used with BEA's LED Signal Lights and BEA sensors to create unique warning indication systems

## RADIO CONTROLS



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### 900 MHZ SERIES

#### LONG RANGE WIRELESS TRANSMITTERS AND RECEIVER

- Frequency-hopping feature ensures strong wireless connection
- Handheld transmitters available in standard 1, 2, 3 and 4 button models
- NEMA 4 rated handheld transmitters available
- Connects up to 500 feet (open-air transmission)

## ACCESSORIES

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### LED SIGNAL LIGHTS

- UL Listed, IP67 models available
- Stackable, Column and Traffic style available



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### 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







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