

# PEDESTRIAN SENSING SOLUTIONS

# TECHNOLOGIES



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** 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 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** 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** 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** 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** technology detects closerange 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** 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** 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.





1	LPR36
•	36" FULL-LENGTH ACTUATOR
2	<b>PUSH PLATES</b> STAINLESS STEEL PUSH PLATES
3	900 MHZ SERIES WIRELESS TRANSMITTERS AND RECEIVER
4	IXIO-DT1 ACTIVATION & SAFETY FOR AUTOMATIC SLIDING DOORS
5	<b>LZR®-FLATSCAN SW</b> DOOR-MOUNTED, SWING DOOR SAFETY SENSOR
6	LZR <sup>®</sup> -MICROSCAN T FIRE RATED DOOR-MOUNTED, SWING DOOR SAFETY SYSTEM
7	SUPERSCAN-T FIRE RATED DOOR-MOUNTED, ACTIVE INFRARED SAFETY SENSOR
8	<b>MS31</b> ADJUSTABLE RANGE, TOUCHLESS ACTUATOR
9	<b>MS41</b> ADJUSTABLE RANGE, STAINLESS STEEL ACTUATOR
10	<b>MS21</b> SHORT-RANGE, TOUCHLESS ACTUATOR
11	SPARROW HIGHLY FLEXIBLE MOTION SENSOR
12	<b>R2E-100</b> UL 294 LISTED REQUEST-TO-EXIT SENSOR
13	MAGLOCKS / GATELOCKS ELECTROMAGNETIC LOCKS
14	ELECTRIC STRIKES



UNIVERSAL KEYPAD IP66 RATED ACCESS CONTROL DEVICE

16
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LOGIC MODULES PROGRAMMABLE 2- & 3-RELAY LOGIC MODULES

# MAXIMIZE ACCESSIBILITY

### IN ANY ENVIRONMENT





### LPR36

#### **36 INCH FULL-LENGTH ACTUATOR**

- Full-length push plate for maximum accessibility
- An economical actuator for ADA building codes requiring two push plates

### PUSH PLATES

#### STAINLESS STEEL PUSH PLATES

- Various sizes and styles for any application
- Highly durable stainless steel withstands weather, cleaning agents and heavy use

# 900 MHZ SERIES

#### 900 MHZ WIRELESS TRANSMITTERS & RECEIVER



- Enables "anywhere mounting" of push plates when wires are not an option (bollards)
- Can be used to activate doors, gates, lights, etc.
- Line of sight transmitting up to 500 feet
- Robust signal travels through walls, partitions, doors and low emissivity glass
- Compact receiver for optimal installation in tight spaces

### RESTROOM KIT

FOR SINGLE OCCUPANCY NORMALLY LOCKED / UNLOCKED RESTROOMS

 Kit includes BR3-X logic module, occupied indicator, "PUSH TO LOCK" button and door position switch

### EMERGENCY ADD-ON KIT

### FOR SINGLE OCCUPANCY RESTROOMS

 Kit includes "ASSISTANCE REQUIRED" signal, "PUSH FOR EMERGENCY ASSISTANCE" button + indicator and emergency signage



are ideal solutions for improving handicap access and maximizing accessibility throughout a building.





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**EMERGENCY BUTT** 



### **KEEP YOUR AUTOMATIC DOORS** SAFE AND RELIABLE



### IXIO-DT1

#### ACTIVATION AND SAFETY SENSOR FOR SLIDING DOORS



- Exceeds ANSI 156.10 for automatic pedestrian sliding doors
- Unidirectional sensing disregards traffic moving away from the door; reducing hold open time and saving energy
- Self-monitoring provides advanced safety by placing the door into a safe mode in case of sensor malfunction

### ZR<sup>®</sup>-FLATSCAN SW

#### STANDALONE, DOOR-MOUNTED SWING DOOR SAFETY SYSTEM

- Meets ANSI 156.10 section 8.8.2
- Easy door width programming using Hand Gesture Setup™ reduces configuration time
- Leading edge safety extends the detection area beyond the leading edge of the door for enhanced safety
- Fully monitored internally, capable of external monitoring

### ZR<sup>®</sup>-MICROSCAN T

#### FIRE RATED STANDALONE, DOOR-MOUNTED SWING DOOR SAFETY SYSTEM

- Exceeds ANSI 156.10 section 8.8.2
- Meets UL 10 B/C, fire rated for up to three hours
- Selectable traffic modes to accommodate normal, heavy and extreme traffic
- Fully monitored internally, capable of external monitoring

## SUPFRSCAN-T

#### FIRE RATED DOOR-MOUNTED, ACTIVE INFRARED SAFETY SENSOR

- Reduces energy consumption and improves HVAC operation by limiting amount of door-open time
- Increases safety by providing convenient reactivation for slow-moving traffic
- Meets UL 10 B/C, fire rated for up to 90 minutes
- Capable of external monitoring

# **DOOR SENSORS**

help maximize accessibility and safety while improving energy usage and creating standards-compliant solutions that help reduce liability.









### TOUCHLESS ACTIVATION **REDUCES GERMS AND MAXIMIZES ACCESSIBILITY**







#### **MICROWAVE TOUCHLESS ACTUATOR WITH** ADJUSTABLE RANGE AND RELAY HOLD TIME



- Adjustable four to 24 inch detection zone
- Faceplates come in jamb, single-gang, doublegang, and round sizes and are available in black, white and gray colors
- Ideal for common areas, corridors and other environments needing touchless activation

### **MS09**

#### NEMA 4 RATED, **TOUCHLESS ACTUATOR**

- Adjustable four to 24 inch detection zone
- Weatherproof, NEMA 4 rated housing for extreme environments
- Ideal for use in industrial settings including warehouses, clean rooms, wash-down areas, etc.

#### ADJUSTABLE 4 TO 24 INCH RANGE, STAINLESS STEEL TOUCHLESS ACTUATOR



- Highly durable stainless steel exterior, IP55 housing
- Adjustable illumination and activation signaling •
- Aesthetically pleasing, low profile design
- Ideal for healthcare, commercial and industrial environments

### MS21

#### SHORT-RANGE **TOUCHLESS ACTUATOR**

- Short-range detection
- Aesthetically pleasing, low profile design in weatherproof, NEMA 4 housing
- Highly durable stainless steel exterior with illuminated edges and activation alerts

# WAVE TO OPEN













# **GERM REDUCTION**

80 percent of infectious diseases are spread by hand. Touchless actuators offer a safe and effective solution for door activation.







# PROTECT VALUABLE RESOURCES

AND MANAGE TRAFFIC FLOW







#### HIGHLY FLEXIBLE MOTION SENSOR

• Can be used to detect people or vehicles in security applications

### R2E-100

#### **UL 294 LISTED REQUEST-TO-EXIT SENSOR**

Request-to-Exit sensor pairs with locking device to increase security by ensuring that a door stays locked unless a person reaches for a door handle, at which point the sensor disables lock







### MAGLOCKS / GATELOCKS

#### DURABLE AND DEPENDABLE ACCESS CONTROL DEVICES

 Magnetic locks provide added level of safety and security for employees

### ELECTRIC STRIKES

### **CYLINDRICAL UNIVERSAL & RIM EXIT**

• ELECTRIC STRIKES offer controlled access at key entrance and exit points



### VERSATILE ACCESS CONTROL DEVICE

• Offers up to 1,010 individual user codes and IP66 rating ideal for outdoor environments

### LOGIC MODULES

#### PROGRAMMABLE 2- & 3-RELAY LOGIC MODULES

- 3-relay, 13 function advanced logic module for sequencing doors with other devices (i.e. RESTROOM KIT)
- Day / Night mode with BR3-X
- 2-relay logic module with built-in 900 MHz wireless technology

# INDUSTRIAL DETECTION SOLUTIONS

help streamline workflow and protect valuable resources. Request-to-Exit devices ensure safety and efficiency in the back-end of a building while promoting a safer, more secure environment for employees.



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