

## **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.

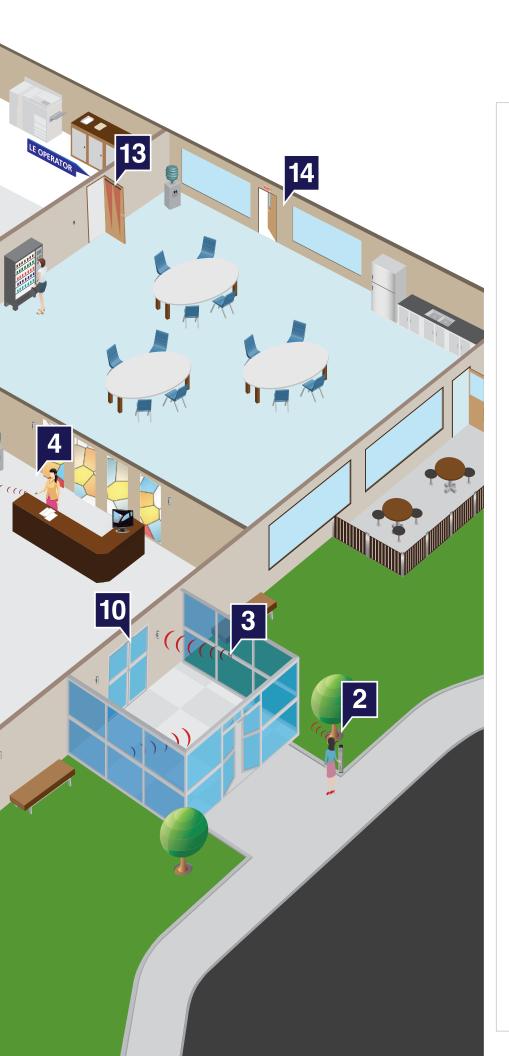


RADIO CONTROL FREQUENCY wireless technology uses transmitters and receivers operating on specific radio frequencies. The transmitter applies a radio frequency alternating current to an antenna, which then radiates radio waves. The receiver receives the transmitted frequency and converts the information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





- MAGIC SWITCH TOUCHLESS ACTUATORS
- 2 LPR36
  36" FULL LENGTH ACTUATOR
- PUSH PLATES
  STAINLESS STEEL PUSH PLATES
- 900 MHZ SERIES
  LONG RANGE WIRELESS
  TRANSMITTERS & RECEIVER
- PNEUMATIC BUTTONS
  RUGGEDIZED BUTTON
  WITH ADJUSTABLE HOLD TIME
- 6 UNIVERSAL KEYPAD
  IP66 RATED
  ACCESS CONTROL DEVICE
- 7 UL LISTED MAGLOCKS
  ELECTROMAGNETIC LOCK
- 8 ELECTRIC STRIKES LOCKING DEVICES
- 9 DE MAGLOCK KIT
  ELECTROMAGNETIC LOCK FOR
  EXIT DOOR APPLICATIONS
- LOGIC MODULES
  PROGRAMMABLE 2- & 3-RELAY
  LOGIC MODULES
- R2E-100
  FOCUSED ACTIVE INFRARED
  REQUEST-TO-EXIT SENSOR
- PASSIVE INFRARED SENSOR FOR REQUEST-TO-EXIT APPLICATIONS
- SUPERSCAN-T
  REACTIVATION SENSOR FOR
  LOW ENERGY DOORS
- **14** SPARROW MICROWAVE MOTION SENSOR
- 15 LZR®-FLATSCAN SW STANDALONE DOOR-MOUNTED, SWING DOOR SAFETY SENSOR
- BEAMBOX
  PRESENCE SENSOR FOR
  OFF-DOOR AUTOMATION
- LZR®-S600 LASER-BASED, PRESENCE SENSOR

## **KNOWING ACT DEVICES**





### MAGIC SWITCH

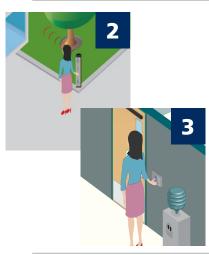
# TOUCHLESS ACTUATORS





- Touchless design reduces spread of germs and bacteria
- Stainless steel models available
- Water-resistant (NEMA 4) variants available
- A variety of adjustable detection ranges are available:
  - MS08 / MS09 offers detection from 4 to 24 inches
  - MS11 offers detection from 2 to 24 inches
  - MS21 offers short-range, touchless activation





### IPR36

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

- Hardwired and wireless versions available
- Exceeds California Building Code 2013, Page 559, 11B-404.2.9, Exception 2c

### **PUSH PLATES**

#### STAINLESS STEEL PUSH PLATES

- Convenient Push Plate Packages Available!
- Available in various sizes and styles to fit almost any application, hardwired and wireless
- Weather resistant, NEMA 4 rated versions available







### 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

### **ACCESSORIES**

### MOUNTING BOXES

# FLUSH & SURFACE MOUNT BOXES

- Easy battery access surface mount box available
- Mounting boxes and brackets
- Adapter and weather rings



### **EXTERIOR MOUNTING OPTION**

 Choice of Bronze, Silver or Black



### JAMB CAM

#### JAMB MOUNTED VIDEO CAMERA

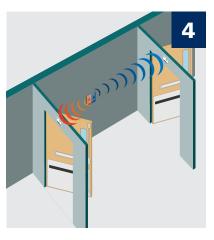
- Full color, enhanced definition video with 480 x 720 (480p) resolution
- Wide angle lens for complete view of door and traffic flow





## WIRELESS SOLUTIONS





### 900 MHZ SERIES

# MOST COMPACT TRANSMITTERS



- 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
- NEMA 4 rated handheld transmitters available
- BEA also offers 433 MHz & 300 MHz frequencies

## **ACCESS CONTROL SOLUTIONS**





### PNEUMATIC BUTTONS

### 2 TO 60 SECONDS, USER-DEFINED HOLD TIME

- Exceeds NFPA safety codes with respect to security button delay time
- Available in single and jamb size plates; buttons available in 1% inch (standard) or 2 inch (large) sizes
- Available in a variety of combinations of color, text and logo upon request
- Tested to perform greater than 1 million operations





### PIEZO BUTTONS

#### 1 TO 40 SECOND, USER-ADJUSTABLE HOLD TIME

- Can be configured to fail-safe or fail-secure
- LED illumination can be customized to user preference
- Stainless steel faceplate and technology appropriate to withstand the rigors of harsh environments
- Vandal / tamper resistant design
- Tested to perform greater than 1 billion operations





### UNIVERSAL KEYPADS

#### **VERSATILE ACCESS CONTROL DEVICES**

- Allows for up to 1010 individual user codes
- IP66 rating ideal for outdoor or harsh environments

### **KFYSWITCHES**

#### **ROBUST STAINLESS STEEL FACEPLATE**

- Aluminum wall plate with tamper-resistant screws
- Available in jamb and single wall plates or double gang combo-plate
- Available with momentary or maintained contact

## LOCKING DEVICES





### **UL LISTED MAGLOCKS**

### INDUSTRY PROVEN ACCESS CONTROL DEVICES

- Built-in LED Bond Status Sensor
- Available with Door Status Sensor
- Available for single and double door applications and in 600 and 1200 lbs
- Field selectable 12 or 24 VDC
- Built-in surge protection





### **ELECTRIC STRIKES**

#### CYLINDRICAL UNIVERSAL & RIM EXIT

- Three modular faceplates for the most common door types: hollow metal, aluminum and wood
- Accepts 0.50 inch or 0.625 inch latch projections a perfect compliment for narrow style aluminum frames
- Conventional keeper design promotes even-load distribution in the event of a forced entry
- Reinforced housing reduces twisting on imperfect frames
- UL / ULC listed for up to 1500 lbs of static strength
- UL 294 listed





### DELAYED EGRESS MAGLOCK KIT

#### FOR PERIMETER EXIT DELAY APPLICATIONS

- Double door (2 single doors) can be synchronized
- Authorized egress time programmable 0 15 seconds
- Selectable 30 second door prop alarm
- LED color and flashes can be customized
- Monitored fire alarm input
- Delayed Egress can be triggered with pressure on the door or with a REX input (or disabled completely)
- UL 294 listed

### **ACCESSORIES**

### **BRACKETS**

#### MAGLOCK BRACKET OPTIONS

- L & Z Brackets
- Glass Door Brackets
- Vertical Spacer
- Armature Housing
- Filler Bars



### CONTROLLERS

# PROGRAMMABLE 2- & 3-RELAY LOGIC MODULES

- 13 function universal module for sequencing doors with other devices (i.e. lights)
- 2-relay logic module with built-in 900 MHz wireless technology

### **POWER SUPPLIES**

#### **UL LISTED**

- Free standing enclosure for powering BEA sensors, locks and accessories
- Battery backup option available





### SENSORS



### R2E-100

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



- Adjustable detection range from 20 to 48 inches
- Low profile sensor mounts on or above the door frame

### FLY KIT

#### COMPACT, VERSATILE REQUEST-TO-EXIT SENSOR

- DIP switches for user-defined settings
- Extended Relay Time (ERT) version is available for hold times of 15 or 30 seconds
- Packages include both ceiling and surface mount adapters

### SUPFRSCAN-T

### **DOOR-MOUNTED PRESENCE SENSOR**

- Ideal for low energy door applications
- Capable of external monitoring

### SPARROW

### HIGHLY FLEXIBLE MOTION SENSOR

- Adjustable detection zones of 20 × 30 feet
- Mounting height from 6½ to 20 feet
- IP64 rated enclosure for harsh environments



### 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

### 17R®-130 / 17R®-S600



## **IDEAL FOR EXTERIOR PERIMETER DETECTION**

- NEMA 4 / IP65 rated enclosure
- LZR $^{\odot}$ -I30: 30 × 30 feet max. detection range
  - LZR®-S600: 82 × 82 feet max. detection range

## FAI CON FX





- Bidirectional, unidirectional approach and unidirectional depart microwave detection options
- Six modes of detection filtering for pedestrian and parallel traffic rejection

## PHOENIX EXTM

### **IDEAL FOR MANUFACTURING & MILITARY FACILITIES**

- 11 lb, explosion-proof / flame-proof housing with integrated tamper alert switch
- Bidirectional, unidirectional approach and unidirectional depart microwave detection options





BEA, Inc.

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

Phone: 1.800.523.2462 Fax: 1.888.523.2462 Customer Service
Phone: 1.800.523.2462
customerservice@BEAinc.com

Technical Support Phone: 1.800.407.4545 tech\_services@BEAinc.com