





# LZR®-FLATSCAN 3D SW

FOUR CURTAIN STAND-ALONE, DOOR-MOUNTED SAFETY SYSTEM WITH VIRTUAL PUSH BUTTON FUNCTIONALITY

**READ MORE ON PAGE 29** 



Three-Dimensional Field Coverage

3D detection field guaranteeing full-safety coverage of the opening area



LASER-based Technology

Capable of ignoring dynamic ground conditions (reflective flooring, pedi-mats, wet surfaces, etc.)



Completely Touchless

For germ-free activation, program up to two Virtual Push Buttons





### **BEA AMERICAS**

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





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# **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.

### 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.

# FIND YOUR APPLICATION

### PEDESTRIAN ENTRANCE SENSORS

Pedestrian Entrance Sensors are designed to improve the flow of people moving in, out and through a building. These solutions maximize safety and accessibility in retail centers, airports, hospitals, educational facilities, offices and other areas with consistent pedestrian-based traffic. Security and Access Control solutions are designed to control access, provide security and streamline workflow in and around buildings. Sensing solutions found within this segment pair seamlessly with door controls and security systems to help maximize safety and security.

#### **DOORS & WINDOWS**













**DEVICES** 

**LOW ENERGY** DOORS

SLIDING DOORS

**SWINGING DOORS** 

REVOLVING DOORS

**AUTOMATED WINDOWS** 

**SECURITY & ACCESS CONTROL** 







**TO-EXIT** 





**NDUSTRIAL DOOR & GATE SENSORS** 

Industrial Door & Gate Sensors can be found in warehouses, distribution centers, delivery bays, docks and other areas needing to effectively manage industrial traffic. These solutions include sensors, signal lights and other devices dedicated to improving traffic flow and protecting resources. Common applications include sensors designed for the activation and safety of high performance doors.

#### **DOORS**







COMMERCIAL DOORS



LOADING DOCKS

#### **GATES & BARRIERS**





**GATES** 

**BARRIERS** 

### **FACTORY & LOGISTICS AUTOMATION SOLUTIONS**

Factory and logistic automation solutions are dedicated to applications that ensures the safety and protection of people, equipment and mobile robots in the industrial environments, including factories, warehouses, etc.

#### **AUTONOMOUS ROBOTS**



AUTOMATED GUIDED VEHICLES



AUTONOMOUS MOBILE ROBOTS

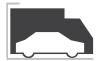


AUTOMATIC FORKLIFT

#### **TRAFFIC & TRANSPORT SOLUTIONS**



PARKING SOLUTIONS



TRAFFIC & TOLL GATES



TRAIN, TRAM & SUBWAY DOORS



**BUS DOORS** 



PLATFORM SCREEN DOORS



WAREHOUSING

#### **ASSET PROTECTION**



ARTWORK PROTECTION



PERIMETER PROTECTION

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## **COLIBRI ONE**

UNIDIRECTIONAL MOTION SENSOR FOR OFF-DOOR APPLICATIONS

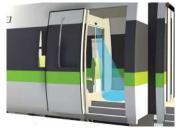
#### **Customizable Settings**

Variable sensitivity adjustment provides different detection areas

#### **Variable Mounting**

Lateral angle adjustment for ceiling-, wall-, and low-level mount versatility





#### **TECHNICAL SPECIFICATIONS**

Technology	Microwave Doppler radar
Detection Mode	Motion
Transmitter Frequency	24.150 GHz
Transmitter Radiated Power	< 20 dBM EIRP
Transmitter Power Density	< 5 mW / cm <sup>2</sup>
Min. Detection Speed	2 in/s (measured in sensor axis)
Supply Voltage	12 – 24 VDC 30% / -10%
Mains Frequency	50 – 60 Hz
Max. Power Consumption	< 2 W
Output	Solid-state-relay (free of potential change-over contact)
Max. Contact Current	100 mA
Max. Contact Voltage	35 VDC / 24 VAC
Mounting Height	6 – 10′
Degree of Protection	IP54
Temperature Range	-4 – 131 °F
Dimensions	3 ½" (W) × 2 ½" (H) × 2 ½" (D)
Tilt Angles	0 – 90° vertical; -30 – 30° lateral
Materials	ABS, PC
Weight	5 oz
Cable Length	8'
Norm Conformity	R&TTE 1999 / 5 / EC EMC 2004 / 108 / EC



### **Compact, Low Profile**

Compact size provides flexibility in mounting

#### **Ideal For Off-Door Applications**

Pairs with LED SIGNAL LIGHTS for warning indication applications









### **EAGLE ARTEK**

COMPACT, MOTION SENSOR FOR AUTOMATIC DOORS

#### **Compact and Attractive Design**

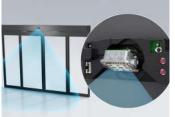
Slim and compact design permits integration with all types of automatic door operators

#### **Energy Efficient**

Immunity Filter, Field Size, and Field Shape settings work together with direction sensing capability (Detection Mode) to reduce door open time











**Easy to Use** 

**Easy to Retrofit** Same mounting references and plug-in interface accessory make it easy to retrofit EAGLE

Electronic management of the radar field shape and push-button

adjustments allow for quick installation and setup





#### **TECHNICAL SPECIFICATIONS**

Technology	Microwave
Detection Mode	Motion
Transmitter Frequency	24.15 GHz
Transmitter Radiated Power	< 20 dBm EIRP
Transmitter Power Density	< 5mW / cm <sup>2</sup>
Max. Detection Range	wide: 13' × 6.5' narrow: 6.5' × 7' (@ 7' high)
Min. Detection Speed	2 in/s
Supply Voltage*	12 – 24 VAC ±10% (50 – 60 Hz) 12 – 24 VDC 30% / -10%
Max. Power Consumption	< 1 W
Output*  Max. Switching Voltage  Max. Switching Current	Solid-state Relay (Free of Polarity) 30 VAC / 42 VDC 100mA (Resistive)
Mounting Height	6 – 13'
Tilt Angles	0 – 90° vertical -30 – 30° lateral
Temperature Range	-4 – 131 °F (-20 – 55 °C)
Dimensions	4.72" (L) × 1.96" (H) × 1.96" (W)
Material	ABS
Weight	120 g
Cable Length	8'
Degree of Protection	IP54
FCC Certification	FCC: G9B-100606 IC: 4680A-100606

10EAGLEARTEK	Microwave motion sensor
10EARA	Rain accessory
10EACA	Ceiling accessory (white)
10EACA-BLK	Ceiling accessory (black)
10EABA	Bracket accessory
35.0303	Replacement cover (black)
35.0319	Replacement cover (white)
35.0320	Replacement cover (silver)
10EARETROFIT	Retrofit interface
10REMOTE	Universal remote control for sensor setup



## **FALCON FAMILY**

MOTION SENSOR FOR INDUSTRIAL DOORS, GATES, AND WARNING INDICATION

#### **Energy Savings**

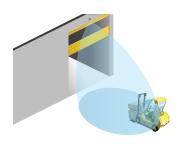
Bidirectional + unidirectional approach and unidirectional depart microwave detection options

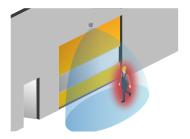
#### **Adjustable Detection Settings**

Six modes of detection filtering for pedestrian and parallel traffic rejection

#### **Adjustable Angle**

Tilt angle from zero to 180°







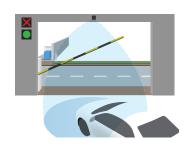
**Remote Control Adjustments** 

**Rated For Harsh Environments** 

make changes from the ground

IP65-rated enclosure

Remote control programming enables user to quickly and safely



#### **TECHNICAL SPECIFICATIONS**

<b>Technology</b> Radiated Frequency Transmitter Radiated Frequency	Microwave Doppler radar 24.150 GHz < 20 dBm EIRP
Radiated Power Density	< 5 mW / cm <sup>2</sup>
Detection Mode	Motion
Detection Zone	
FALCON	13' × 16' at 16'
FALCON XL	13' × 6 ½' at 8 ½'
FALCON WIDE	30' × 11' at 21'
	Typical at 30° and field size 9
Tilt Angles	0 – 180°
Output	Relay (free of potential change-over contact)
Max. Contact Voltage	42 VAC/VDC
Max. Contact Current	1 A (resistive)
Max. Switching Power	30 W (DC); 60 VA (AC)
Minimum Detection Speed	2 in/s*
Mains Frequency	50 – 60 Hz
Supply Voltage	12 – 24 VAC; ±10%
	12 – 24 VDC; 30% / -10%
Power Consumption	< 2 W
Mounting Height	
FALCON	11 ½ – 23′
FALCON XL	6 ½ – 11 ½′
FALCON WIDE	11 ½ – 21′
Dimensions	3 <sup>3</sup> / <sub>4</sub> " (W) × 4" (H) × 5" (L)
Materials	ABS, PC
Temperature Range	-22 – 140 °F
Degree of Protection	IP65
Norm Conformity	EMC: 2004 / 108 / EC R&TTE: 1999 / 5 / EC

<sup>\*</sup> Measured in optimal conditions

10FALCON	Industrial motion detector (11 ½ – 23' high mount)	
10FALCONW	Industrial motion detector with wide detection fields $(11 \frac{1}{2} - 21')$ high mount	
10FALCONXL	Industrial motion detector for low mounting (6 $\frac{1}{2}$ – 11 $\frac{1}{2}$ high mount)	
10INDBRACKET	Industrial mounting bracket	
10MINIBRACKET	Short, adjustable mounting bracket	
10WBA	Universal mounting bracket arm	
10WBAMOUNT	Universal mounting bracket plate	
10REMOTE	Universal remote control for sensor setup	
20.5365	FALCON harness (100')	
35.1568	FALCON harness (30')	



### **FALCON EX FAMILY**

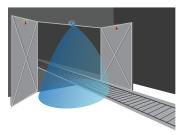
MOTION SENSOR WITH EXPLOSION-PROOF AND FLAME-PROOF HOUSING

#### **Energy Savings**

Bidirectional + unidirectional approach and unidirectional depart microwave detection options

#### **Adjustable Detection Settings**

Six modes of detection filtering for pedestrian and parallel traffic rejection





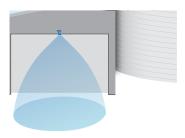


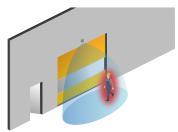
#### **Easy to Program**

Remote control programming enables user to quickly and safely make changes from the ground

#### **Explosion-proof and Highly Durable**

Explosion-proof and flame-proof housing weighs 11 pounds





#### **TECHNICAL SPECIFICATIONS**

Transmitter Radiated Frequency Radiated Power Density < 5 mW / cm²  Detection Mode Motion  Detection Zone  FALCON EX 13' × 16' at 16' FALCON EX XL 13' × 6½' at 8½' FALCON EX WIDE 30' × 11' at 21' Typical at 30° and field size 9  Tilt Angles -90 – 30° in elevation  Output Relay (free of potential change-over contact)  Max. Contact Voltage 42 VAC/VDC 14 (resistive) Max. Switching Power 30 W (PC); 60 VA (AC)  Minimum Detection Speed 2 in/s  Mains Frequency 50 – 60 Hz  Supply Voltage 12 – 24 VAC; ±10% 12 – 24 VDC; 30% / -10%  Maximum Power Consumption < 2 W  Mounting Height FALCON EX 11 ½ – 23' FALCON EX XL 6 ½ – 11 ½' FALCON EX WIDE 11 ½ – 21'  Dimensions Housing and Bracket 5 ½" (L) × 7 ½" (W) × 9" (H)  Electrical Access NPT Pipe Thread ¾"  Weight 10 lbs  Cable Length See User's Guide for reference  Materials Copper-free Aluminum, Aluminum  Temperature Range -22 – 140 °F	<b>Technology</b> Radiated Frequency	Microwave Doppler radar 24.150 GHz
Detection Zone       Hall on the control of the control		< 20 dBm EIRP
Detection Zone FALCON EX FALCON EX XL FALCON EX WIDE  Tilt Angles  Output  Max. Contact Voltage Max. Switching Power  Mains Frequency  Supply Voltage  Maximum Power Consumption  Mounting Height FALCON EX FA	Radiated Power Density	$< 5 \text{ mW} / \text{cm}^2$
FALCON EX FALCON EX XL FALCON EX XL FALCON EX WIDE  Tilt Angles  Output  Max. Contact Voltage Max. Contact Current Max. Switching Power  Max. Switching Power  Mains Frequency  Supply Voltage  Maximum Power Consumption  Mounting Height FALCON EX	Detection Mode	Motion
FALCON EX XL FALCON EX WIDE  130' × 11' at 21' Typical at 30° and field size 9  Tilt Angles  -90 - 30° in elevation  Output Relay (free of potential change-over contact) Max. Contact Voltage Max. Contact Current Max. Switching Power  1 A (resistive) Max. Switching Power 30 W (DC); 60 VA (AC)  Minimum Detection Speed  Mains Frequency 50 - 60 Hz  Supply Voltage 12 - 24 VAC; ±10% 12 - 24 VDC; 30% / -10%  Maximum Power Consumption  Mounting Height FALCON EX FALCON EX FALCON EX 11 ½ - 23' FALCON EX K 6 ½ - 11 ½' FALCON EX WIDE  11 ½ - 21'  Dimensions Housing and Bracket 5 ½" (L) × 7 ½" (W) × 9" (H)  Electrical Access NPT Pipe Thread  ¾"  Weight 10 lbs  Cable Length See User's Guide for reference  Materials Copper-free Aluminum, Aluminum  Temperature Range -22 - 140 °F	Detection Zone	
FALCON EX WIDE  30' x 11' at 21' Typical at 30° and field size 9  Tilt Angles  -90 – 30° in elevation  Output Relay (free of potential change-over contact) Max. Contact Voltage Max. Contact Current Max. Switching Power  1 A (resistive) Max. Switching Power 30 W (DC); 60 VA (AC)  Minimum Detection Speed  Mains Frequency 50 – 60 Hz  Supply Voltage 12 – 24 VAC; ±10% 12 – 24 VDC; 30% / -10%  Maximum Power Consumption  Mounting Height FALCON EX FALCON EX FALCON EX FALCON EX 11 ½ – 23' FALCON EX WIDE 11 ½ – 21'  Dimensions Housing and Bracket 5 ½" (L) x 7 ½" (W) x 9" (H)  Electrical Access NPT Pipe Thread  %"  Weight 10 lbs  Cable Length See User's Guide for reference  Materials Copper-free Aluminum, Aluminum  Temperature Range -22 – 140 °F	FALCON EX	
Typical at 30° and field size 9  Tilt Angles  -90 – 30° in elevation  Output  Relay (free of potential change-over contact)  Max. Contact Voltage Max. Contact Current Max. Switching Power  30 W (DC); 60 VA (AC)  Minimum Detection Speed  Mains Frequency  50 – 60 Hz  Supply Voltage  12 – 24 VAC; ±10% 12 – 24 VDC; 30% / -10%  Maximum Power Consumption  Maximum Power Consumption  Mounting Height FALCON EX FALCON EX FALCON EX 11 ½ – 23' FALCON EX WIDE  11 ½ – 21'  Dimensions Housing and Bracket  5 ½" (L) × 7 ½" (W) × 9" (H)  Electrical Access NPT Pipe Thread  %"  Weight  10 lbs  Cable Length See User's Guide for reference  Materials  Copper-free Aluminum, Aluminum  Temperature Range  -22 – 140 °F		
Tilt Angles  -90 – 30° in elevation  Output  Relay (free of potential change-over contact)  Max. Contact Voltage Max. Contact Current Max. Switching Power  Max. Switching Power Contact)  Max. Switching Power  Max. Switching Power  Max. Switching Power Contact)  Max. Switching Power Contact, Contact Power Contact, Contact Power Contact	FALCON EX WIDE	
Max. Contact Voltage         42 VAC/VDC           Max. Contact Current         1 A (resistive)           Max. Switching Power         30 W (DC); 60 VA (AC)           Minimum Detection Speed         2 in/s           Mains Frequency         50 – 60 Hz           Supply Voltage         12 – 24 VAC; ±10%           12 – 24 VDC; 30% / -10%           Maximum Power Consumption         < 2 W           Mounting Height         FALCON EX           FALCON EX         11 ½ – 23'           FALCON EX WIDE         11 ½ – 21'           Dimensions         11 ½ – 21'           Housing and Bracket         5 ½" (L) × 7 ½" (W) × 9" (H)           Electrical Access         NPT Pipe Thread           Meight         10 lbs           Cable Length         See User's Guide for reference           Materials         Copper-free Aluminum, Aluminum           Temperature Range         -22 – 140 °F	Tilt Angles	21
Max. Contact Current         1 A (resistive)           Max. Switching Power         30 W (DC); 60 VA (AC)           Minimum Detection Speed         2 in/s           Mains Frequency         50 – 60 Hz           Supply Voltage         12 – 24 VAC; ±10%           12 – 24 VDC; 30% / -10%           Maximum Power Consumption         < 2 W           Mounting Height         FALCON EX           FALCON EX         11 ½ – 23'           FALCON EX XL         6 ½ – 11 ½'           FALCON EX WIDE         11 ½ – 21'           Dimensions         Housing and Bracket         5 ½" (L) × 7 ½" (W) × 9" (H)           Electrical Access         NPT Pipe Thread         ¾"           Weight         10 lbs           Cable Length         See User's Guide for reference           Materials         Copper-free Aluminum, Aluminum           Temperature Range         -22 – 140 °F	Output	Relay (free of potential change-over contact)
Max. Switching Power         30 W (DC); 60 VA (AC)           Minimum Detection Speed         2 in/s           Mains Frequency         50 – 60 Hz           Supply Voltage         12 – 24 VAC; ±10%           12 – 24 VDC; 30% / -10%           Maximum Power Consumption         < 2 W           Mounting Height         11 ½ – 23'           FALCON EX         11 ½ – 23'           FALCON EX WIDE         11 ½ – 21'           Dimensions         11 ½ – 21'           Housing and Bracket         5 ½" (L) × 7 ½" (W) × 9" (H)           Electrical Access         NPT Pipe Thread           NPT Pipe Thread         ¾"           Weight         10 lbs           Cable Length         See User's Guide for reference           Materials         Copper-free Aluminum, Aluminum           Temperature Range         -22 – 140 °F	Max. Contact Voltage	42 VAC/VDC
Minimum Detection Speed         2 in/s           Mains Frequency         50 − 60 Hz           Supply Voltage         12 − 24 VAC; ±10%           12 − 24 VDC; 30% / -10%           Maximum Power Consumption         < 2 W           Mounting Height         11 ½ − 23′           FALCON EX         11 ½ − 23′           FALCON EX WIDE         11 ½ − 21′           Dimensions         11 ½ − 21′           Housing and Bracket         5 ½" (L) × 7 ½" (W) × 9" (H)           Electrical Access         NPT Pipe Thread           Weight         10 lbs           Cable Length         See User's Guide for reference           Materials         Copper-free Aluminum, Aluminum           Temperature Range         -22 − 140 °F		
Mains Frequency         50 − 60 Hz           Supply Voltage         12 − 24 VAC; ±10%           12 − 24 VDC; 30% / -10%           Maximum Power Consumption         < 2 W           Mounting Height         11 ½ − 23′           FALCON EX         11 ½ − 23′           FALCON EX WIDE         11 ½ − 21′           Dimensions         11 ½ − 21′           Housing and Bracket         5 ½" (L) × 7 ½" (W) × 9" (H)           Electrical Access         NPT Pipe Thread           Weight         10 lbs           Cable Length         See User's Guide for reference           Materials         Copper-free Aluminum, Aluminum           Temperature Range         -22 − 140 °F	Max. Switching Power	30 W (DC); 60 VA (AC)
Supply Voltage $12-24 \text{ VAC}$ ; $\pm 10\%$ $12-24 \text{ VDC}$ ; $30\% \text{ / -}10\%$ Maximum Power Consumption $< 2 \text{ W}$ Mounting Height $11 \text{ 1/2} - 23'$ FALCON EX FALCON EX XL FALCON EX WIDE $6 \text{ 1/2} - 11 \text{ 1/2}'$ 	Minimum Detection Speed	2 in/s
Maximum Power Consumption       < 2 W         Mounting Height       11 ½ − 23′         FALCON EX       11 ½ − 23′         FALCON EX XL       6 ½ − 11 ½′         FALCON EX WIDE       11 ½ − 21′         Dimensions       5 ½" (L) × 7 ½" (W) × 9" (H)         Electrical Access       NPT Pipe Thread         NPT Pipe Thread       ¾"         Weight       10 lbs         Cable Length       See User's Guide for reference         Materials       Copper-free Aluminum, Aluminum         Temperature Range       -22 − 140 °F	Mains Frequency	50 – 60 Hz
Maximum Power Consumption     < 2 W       Mounting Height     FALCON EX     11 ½ - 23'       FALCON EX XL     6 ½ - 11 ½'     FALCON EX WIDE       Dimensions     11 ½ - 21'       Housing and Bracket     5 ½" (L) × 7 ½" (W) × 9" (H)       Electrical Access     NPT Pipe Thread     ¾"       Weight     10 lbs       Cable Length     See User's Guide for reference       Materials     Copper-free Aluminum, Aluminum       Temperature Range     -22 - 140 °F	Supply Voltage	12 – 24 VAC; ±10%
Mounting Height  FALCON EX FALCON EX FALCON EX XL FALCON EX XL FALCON EX WIDE  11 ½ - 21'  Dimensions Housing and Bracket  5 ½" (L) × 7 ½" (W) × 9" (H)  Electrical Access NPT Pipe Thread  ¾"  Weight  10 lbs  Cable Length  See User's Guide for reference  Materials  Copper-free Aluminum, Aluminum  Temperature Range  -22 - 140 °F		12 – 24 VDC; 30% / -10%
FALCON EX FALCON EX XL FALCON EX XL FALCON EX WIDE  Dimensions Housing and Bracket  FElectrical Access NPT Pipe Thread  Weight  Cable Length  See User's Guide for reference  Materials  Copper-free Aluminum, Aluminum  Temperature Range  11 ½ - 23' FALCON EX XL FALCO	<b>Maximum Power Consumption</b>	< 2 W
FALCON EX XL FALCON EX WIDE  11 ½ - 21'  Dimensions Housing and Bracket  5 ½" (L) × 7 ½" (W) × 9" (H)  Electrical Access NPT Pipe Thread  Weight  10 lbs  Cable Length  See User's Guide for reference  Materials  Copper-free Aluminum, Aluminum  Temperature Range  -22 - 140 °F	Mounting Height	
FALCON EX WIDE  11 ½ – 21'  Dimensions Housing and Bracket  5 ½" (L) × 7 ½" (W) × 9" (H)  Electrical Access NPT Pipe Thread  Weight  10 lbs  Cable Length  See User's Guide for reference  Materials  Copper-free Aluminum, Aluminum  Temperature Range  -22 – 140 °F	FALCON EX	11 ½ – 23′
Dimensions       Housing and Bracket     5 ½" (L) × 7 ½" (W) × 9" (H)       Electrical Access       NPT Pipe Thread     ¾"       Weight     10 lbs       Cable Length     See User's Guide for reference       Materials     Copper-free Aluminum, Aluminum       Temperature Range     -22 − 140 °F		
Housing and Bracket 5 ½" (L) × 7 ½" (W) × 9" (H)  Electrical Access     NPT Pipe Thread ¾"  Weight 10 lbs  Cable Length See User's Guide for reference  Materials Copper-free Aluminum, Aluminum  Temperature Range -22 - 140 °F	FALCON EX WIDE	11 ½ – 21′
Electrical Access NPT Pipe Thread 34"  Weight 10 lbs  Cable Length See User's Guide for reference  Materials Copper-free Aluminum, Aluminum  Temperature Range -22 - 140 °F		
NPT Pipe Thread ¾"  Weight 10 lbs  Cable Length See User's Guide for reference  Materials Copper-free Aluminum, Aluminum  Temperature Range -22 - 140 °F	Housing and Bracket	5 ½" (L) × 7 ½" (W) × 9" (H)
Weight10 lbsCable LengthSee User's Guide for referenceMaterialsCopper-free Aluminum, AluminumTemperature Range-22 - 140 °F		
Cable Length     See User's Guide for reference       Materials     Copper-free Aluminum, Aluminum       Temperature Range     -22 - 140 °F	NPT Pipe Thread	3/4"
Materials Copper-free Aluminum, Aluminum Temperature Range -22 – 140 °F	Weight	10 lbs
Temperature Range -22 – 140 °F	Cable Length	See User's Guide for reference
	Materials	Copper-free Aluminum, Aluminum
Housing Certification* See User's Guide	Temperature Range	-22 – 140 °F
nousing certification	Housing Certification*	See User's Guide
Norm Conformity EMC: 2004 / 108 / EC R&TTE: 1999 / 5 / EC	Norm Conformity	

<sup>\*</sup> Adalet / Scott Fetzer Co., UL Listing #E81696

10FALCONEX100	Industrial motion detector with 100' harness (11 ½ – 23' high mount)
10FALCONEXW100	Industrial motion detector with wide detection fields and 100' harness (11 $\frac{1}{2}$ – 21' high mount)
10FALCONEXXL100	Industrial motion detector for low mounting with 100' harness (6 $\frac{1}{2}$ – 11 $\frac{1}{2}$ ' high mount)
10INDBRACKET	Industrial mounting bracket
10REMOTE	Universal remote control for sensor setup
20.5365	FALCON harness (100')
35.1568	FALCON harness (30')





## PHOENIX EX™ FAMILY

MOTION SENSOR WITH EXPLOSION-PROOF AND FLAME-PROOF HOUSING FOR INTRUSION PROTECTION

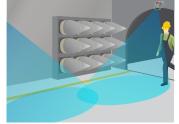
#### **Energy Savings**

Bidirectional + unidirectional approach and unidirectional depart microwave detection options

#### **Tamper Proof**

Integrated, tamper alert switch and end-of-line resistors



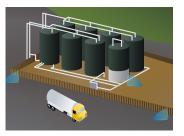


#### **Certified Housing**

Explosion-proof and flame-proof housing, weighs 10 pounds

#### **Customizable Detection Angle**

Tilt adjustment angle: -90 to 30° in elevation





#### **TECHNICAL SPECIFICATIONS**

Technology	Microwave Doppler radar
Transmitter Frequency	24.150 GHz
Transmitter Radiated Power	< 20 dBm EIRP
Transmitter Power Density  Detection Mode	< 5 mW / cm <sup>2</sup> Motion
Output*	Relay (free of potential change-over contact)
Maximum Contact Voltage	42 VAC/VDC
Maximum Contact Current	1 A (resistive)
Maximum Switching Power	30 W (DC); 60 VA (AC)
Anti-Tamper Feature	
PHOENIX EX	product anti-tamper (magnetic switch within cover, alerts when cover is unscrewed)
	2) application-based anti-tamper (tamper alert via end-of-line resistor)
PHOENIX EX-IT	Tamper alert via output
Minimum Detection Speed	2 in/s*
Supply Voltage	12 – 24 VAC; ±10%
	12 – 24 VDC; 30% / -10%
Mains Frequency	50 – 60 Hz
<b>Maximum Power Consumption</b>	< 2 W
<b>Electrical Access</b>	3/4"
Cable Length	30' or 100' (default), diameter 1/4" max
<b>Detection Zone</b>	
PHOENIX EX	13' × 16' at 16'
PHOENIX EX XL	13' × 16 ½' at 8 ½'
PHOENIX EX WIDE	30' × 11' at 21'
	Typical at 30° and field size 9
Mounting Height PHOENIX EX	11 ½ – 23′
PHOENIX EX	6 ½ – 11 ½'
PHOENIX EX WIDE	11 ½ – 21′
Dimensions	
Housing and Bracket	5 ½" (H) × 7 ½" (W) × 9" (L)
Weight	10 lbs
Temperature Range	-22 – 140 °F
Housing Certification***	See User's Guide
Norm Conformity	EMC: 2004 / 108 / EC R&TTE: 1999 / 5 / EC

#### **PRODUCT SERIES**

10PHOENIXEX100	Industrial motion detector with 100' harness (11 ½ – 23' high mount)
10PHOENIXEXXL100	Industrial motion detector for low mounting with 100' harness (6 $\frac{1}{2}$ – 11 $\frac{1}{2}$ ' high mount)
10PHOENIXEXW100	Industrial motion detector with wide detection fields and 100' harness (11 $\frac{1}{2}$ – 21' high mount)
10PHOENIXEX-IT100	Industrial motion detector with 100' harness (11 ½ – 23' high mount)
10PHOENIXEXXL-IT100	Industrial motion detector for low mounting with 100' harness (6 ½ – 11 ½' high mount)
10PHOENIXEXW-IT100	Industrial motion detector with wide detection fields and 100' harness (11 $\frac{1}{2}$ – 21' high mount)
10REMOTE	Universal remote control for sensor setup

Contact your BEA Sales Representative for PHOENIX  $\mathsf{EX}^\mathsf{TM}$  ordering information

<sup>\*</sup> Measured in optimal conditions

<sup>\*\*</sup> Output ratings may vary depending on optional end-of-line resistor values

<sup>\*\*\*</sup> Adalet / Scott Fetzer Co., UL Listing #E81696





## **SPARROW**

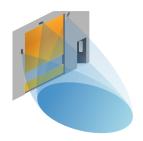
VARIABLE MOUNT, INDUSTRIAL MOTION SENSOR

#### **Flexible Mounting**

Mounting height from 6 ½ feet to 20 feet

#### **Adjustable For Optimal Detection**

Ten sensor-sensitivity settings can be applied to optimize detection





#### **TECHNICAL SPECIFICATIONS**

Technology Transmitter Frequency Transmitter Radiated Power Transmitter Power Density	Microwave Doppler radar 24.150 GHz < 20 dBm EIRP < 5 mW / cm <sup>2</sup>
Detection Mode	Motion
Tilt Angle	0 – 90° vertical; -120 – 120° lateral
Output  Max. Contact Voltage  Max. Contact Current  Max. Switching Power	Relay (free of potential change-over contact) 42 VAC - 60 VDC 1 A (resistive) 30 W (DC) / 60 VA (AC)
Minimum Detection Speed	2 in/s (measured in the sensor axis)
Frequency	50 – 60 Hz
Supply Voltage	12 – 24 VAC ±10% 12 – 24 VDC; 30% / -10%
<b>Maximum Power Consumption</b>	< 2 W
Mounting Height	6 ½ – 20′
Dimensions	5 ½" (L) × 2 ¼" (H) × 2 ⅓" (W)
Material	ABS
Color	Black
Weight	5.8 oz
Cable Length	30'
Temperature Range	-22 – 140 °F
Degree of Protection	IP64
Norm Conformity	R&TTE 1999 / 5 / EC EMC 2004 / 108 / EC



#### **Weather Resistant**

IP64-rated enclosure for industrial and harsh environments

#### **Customizable Settings**

Immunity settings can be adjusted to reduce unwanted detections caused by rain, snow, and header vibrations





10SPARROW	Variable-mount motion sensor
10REMOTE	Universal remote control for sensor setup
10INDBRACKET	Industrial mounting bracket



17



## **BODYGUARD-T**

OVERHEAD PRESENCE SENSOR FOR AUTOMATIC DOORS



Versatile sensor can be used on single swing, simultaneous pair, dual egress, and folding doors when coupled with an interface / lockout device

#### **Tailor For Application Needs**

Adjustable tilt angle from zero to 10°

#### **Visible Indication**

Visible LED indicates connection between sensor and door control





#### **Customized Detection**

Separate pattern width, depth, and sensitivity for open- and closed-door states provide maximum flexibility

#### **Standards Compliant**

Fully monitored internally; capable of external monitoring

#### **TECHNICAL SPECIFICATIONS**

Technology	Active infrared
Detection Mode	Presence
Installation Height (variable)	9' 0" maximum (recommended: 6' 6" - 8' 0")
Mounting Angles	
BODYGUARD Only	5°, 10° (factory default setting: 5°)
With BODYMOUNT	0°, 5°, 10°
Power Supply	12 – 24 VAC/VDC ±10%
Frequency	50 – 60 Hz
Output	
Max. Contact Voltage	60 VDC / 125 VAC
Max. Contact Current	1 A
Max. Power Supply	30 W (DC), 60 VA (AC)
Relay Hold Time	0.5 – 9 s
<b>Operating Temperature</b>	-22 – 140 °F
Immunity	Immune to electrical and radio frequency interference
Cable	4'
Weight	1 lb 11 oz
Dimensions	12" (W) × 2" (H) × 2" (D)
Materials	Aluminum, ABS
Housing	Black anodized aluminum

10BODYGUARDT	Header-mounted, safety sensor
10BODYMNT	Spacer for BODYGUARD-T
10BGQD	Quick-disconnect cable for BODYGUARD-T (78")
10CAPKIT	(1) left / (1) right end cap and mounting screws
10HORTONSSHARN	BODYGUARD-T / SUPERSCAN-T relay harness for use with Horton Control
10LO21	Lock-out modules see page 55 for more information
10REMOTE	Universal remote control for sensor setup
10URC	Universal rain cover for BODYGUARD-T
15.0075	Harness for LO21 and LO21P
20.2015	BODYGUARD-T light pipe and cover for light pipe
30.0345	7-position, female pin connector
41.3879	Adjustable mounting clips for PCB
70.0207	BODYGUARD-T lens cut to 4 1/8"



### **FLY KIT**

COMPACT, PASSIVE INFRARED REQUEST-TO-EXIT SENSOR

#### **Precise Infrared Detection**

Sensing field adjustment masks provide accurate detection zones (two included)

#### **Customizable**

DIP switches for user-defined settings



#### **TECHNICAL SPECIFICATIONS**

Technology	Passive infrared with microprocessor
Mounting Height Recommended	6 ½ – 8' (max. 10')
Mounting Angles	0 – 180°
Power Supply	12 – 24 VAC ±10% 50/60 Hz 12 – 24 VDC -10% / 30%
<b>Current Consumption</b>	< 10 mA (20 mA if the relay output is activated)
Contact Rating	1 A / 75 VDC or 50 VAC potential free contact NO / NC
Optical Characteristics	Passive infrared with four elements 15 Fresnel lenses with full independent masking possibilities
Warm-up Time	10 s
Response Time	200 ms (max)
Relay Hold Time Standard Fly Fly Extended Relay Time	0.5 or 2 s 15 or 30 s
Operating Temperature	-22 – 140 °F (-30 – 55 °C)
Cable	9' 4-conductor cable with 5-pin connector
Weight	1.4 oz (40 g)
Sensor Dimensions	4" (W) × 1 1/5" (H) × 1" (D)
Housing Color	Black



#### **Adjustable Access Settings**

Extended Relay Time (ERT) version is available for hold times of 15 or 30 seconds

#### **Low-Profile Design**

Compact, aesthetically pleasing design; packages include both ceiling- and surface-mount adapters

10FLYKITB	<ul><li>(1) Passive infrared detector for request-to-exit applications (black)</li><li>(1) Surface adapter (black)</li><li>(1) Flush mounted ceiling adapter (black)</li></ul>
10FLYKITBERT	<ul><li>(1) Passive infrared detector with extended relay time (black)</li><li>(1) Surface adapter (black)</li><li>(1) Flush mounted ceiling adapter (black)</li></ul>
70.0011	22 gauge 4-conductor cable sold by the foot



## **FOCUS FAMILY**

FOCUSED, ACTIVE INFRARED PRESENCE SENSORS

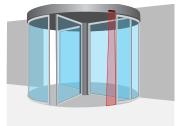
#### **Low-Profile Detection**

Low profile, recessed mount enables FOCUS 2 and SMART FOCUS to protect pedestrians from contact with the moving door

#### **Monitoring Capable**

SMART FOCUS is fully monitored (not FOCUS or FOCUS 2)





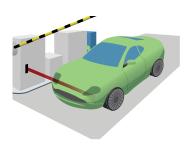


#### **Perfect For Activation Of Small Windows and Pass-Thru**

Ideal for drive-thru and pass-thru applications

#### **Ideal for Gates and Barriers**

Horizontal mount for use in gate and barrier applications



#### **TECHNICAL SPECIFICATIONS**

10FOCUS and 10FOCU	JS2
Technology	Focused, active infrared
<b>Detection Mode</b>	Presence
Power Supply	24 VAC/VDC ±10%
<b>Current Consumption</b>	60 mA (on); 30 mA (off)
Output Interface; Relay	Relay; max. contact rating is 1 A at 30 V (resistive)
<b>Detection Range</b>	0 – 8 1/5'
Distance Adjustment	2 – 8', rotating cam with linear adjustment
<b>Detection Time</b>	< 50ms
<b>Detection Signal Duration</b>	Infinite presence detection
LED Activity	
Green	No detection
<b>Operating Temperature</b>	-30 – 140 °F
Range	
Connection to controller	5-conductor cable
Relay Output	NO or NC

#### **PRODUCT SERIES**

10FOCUS	Distance-measuring, active infrared presence sensor (surface-mount)
10FOCUS2	Distance-measuring, active infrared presence sensor (recessed-mount)
10SMARTFOCUS	Distance-measuring, active infrared presence sensor (recessed-mount); adapts to environment by the push of a button
10SMARTFOCUSSMA	Surface-mount adapter for SMART FOCUS sensor
15.0118	FOCUS 2 harness (240")
70.0068	FOCUS harness (48")
35.1128	6-conductor cable with socket for SMART FOCUS
70.0138	Lens extrusion, ordered by inch (9" needed for 10FOCUS lens replacement)

#### **10SMARTFOCUS**

Technology	Focused, active infrared
<b>Detection Mode</b>	Presence detection by distance measurement
Detection Field	1 $^{19}$ 50" × 2 $^{19}$ 25" at 7 $^{14}$ 1' mounting height
Light Indicator	
Red	ON during detection
Orange	Flashes 1x after power on
Response Time	64 ms
Mounting Height	2 – 10'
Supply Voltage	12 – 24 VAC/VDC -5% / 10%
Mains Frequency	50 – 60 Hz
Max. Current Consumption	120 mA at 24 VAC / 80 mA at 24 VDC
Standard Output	Relay (free of potential contact)
Max. Contact Voltage	42 VAC/VDC
Max. Contact Current	1 A (resistive)
Max. Switching Power	30 W (DC) / 60 VA (AC)
Monitoring Input	1 optocoupler (free of potential contact)
Max. Contact Voltage	30 V
Voltage Threshold	High state: > 10 V Low State: < 1 V
Hold Time	0.5 s
Reflectivity	min. 10% at IR-wavelength of 850 nm
Temperature Range	-13 – 131 °F (-25 – 55 °C)
	0 – 95% rel. humidity, non-condensing
Degree of Protection	IP53
Dimensions	5 <sup>3</sup> / <sub>4</sub> " (L) × 1 <sup>3</sup> / <sub>5</sub> " (H) × 2" (D)
Length of Main Cable	8'
Norm Conformity	IEC 61000-6-2; IEC 61000-6-3
	ISO 13849-1 Performance Level «c» CAT. 2 (under the
	condition that the door control system monitors the
	sensor at least once per door cycle)







#### PRESENCE SENSOR WITH VIRTUAL LOOP FUNCTIONALITY

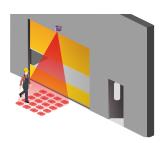
#### **Adjustable Learn Time**

Nine unique infrared patterns capable of highly flexible presence detection in any industrial environment

#### **Reduce False Detections**

Six modes of detection filtering are available for microwave immunity, as well as pedestrian and parallel traffic rejection





#### **TECHNICAL SPECIFICATIONS**

Technology	Active infrared
Detection Mode	Presence
Mains Frequency	50 – 60 Hz
Power Consumption	< 3.5 W
Output  Max. Contact Voltage  Max. Contact Current  Max. Switching Power	2 relays (free of potential change-over contact) 42 VAC/VDC 1 A (resistive) 30 W (DC) / 48 VA (AC)
Supply Voltage	12 – 24 VAC; ±10% 12 – 24 VDC; 10% / -3%
Temperature Range	-22 – 140 °F
Tilt Angle	15 – 45°
Transmitter Frequency / Wavelength	875 nm
<b>Transmitter Power Density</b>	< 250 mW / m <sup>2</sup>
Detection Field	10' × 10' at max. mounting height of 16' (emitting spots)*
Output Hold Time	0.5 s
Min. Detection Speed	0 in/s to activate detection
Reaction Time	250 ms
Mounting Height	8 – 16'
Humidity	0 – 95% non-condensing
Weight	14 oz
Dimensions	3 1/5" (W) × 4" (H) × 5" (D)
Materials	ABS, PC
Cable Length	32'
Degree of Protection	IP65
Norm Conformity	EMC: 2004 / 108 / EC R&TTE: 1999 / 5 / EC

<sup>\*</sup> Zone detected by SPOTFINDER (i.e. slightly larger than actual detection field)



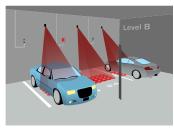
#### **Programmable Via Remote**

Remote control programming enables user to quickly and safely make changes from the ground (sold separately)

#### **Easy to Program**

Adjustable infrared immunity modes mitigate environmental disturbances such as subtle door vibrations, light, sun, rain, and snow





10INDBRACKET     Industrial mounting bracket       10MINIBRACKET     Short, adjustable mounting bracket       10WBA     Universal mounting bracket arm       10WBAMOUNT     Universal mounting bracket plate       10REMOTE     Universal remote control for sensor setup       10SPOTFINDER     Active infrared spotfinder       35.1566     8-pin conductor cable (30°)	10IS40P	Industrial sensor utilizing active infrared presence detection
10WBA     Universal mounting bracket arm       10WBAMOUNT     Universal mounting bracket plate       10REMOTE     Universal remote control for sensor setup       10SPOTFINDER     Active infrared spotfinder	10INDBRACKET	Industrial mounting bracket
10WBAMOUNT     Universal mounting bracket plate       10REMOTE     Universal remote control for sensor setup       10SPOTFINDER     Active infrared spotfinder	10MINIBRACKET	Short, adjustable mounting bracket
10REMOTE         Universal remote control for sensor setup           10SPOTFINDER         Active infrared spotfinder	10WBA	Universal mounting bracket arm
<b>10SPOTFINDER</b> Active infrared spotfinder	10WBAMOUNT	Universal mounting bracket plate
	10REMOTE	Universal remote control for sensor setup
<b>35.1566</b> 8-pin conductor cable (30')	10SPOTFINDER	Active infrared spotfinder
	35.1566	8-pin conductor cable (30')





### IXIO-ST

PRESENCE SENSOR FOR AUTOMATIC, SLIDING DOORS



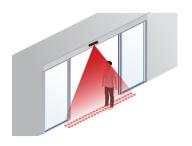
Two 24-spot, high-density infrared, safety curtains providing precise presence detection

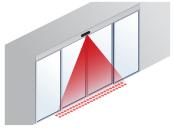
#### **Easily Adjustable**

Four visible, red, alignment spots are projected on the ground to assist in precise IR curtain adjustment

#### **Ease of Setup**

Intelligent programming and troubleshooting via a menu-driven LCD





#### **TECHNICAL SPECIFICATIONS**

Detection Mode	Presence typical response time: < 200 ms (max: 500 ms)
Technology	Active infrared with background analysis Spot: 2" × 2" (typ) Number of spots: max. 24 per curtain Number of curtains: 2
Mounting Height	6 ½ – 11 ½' local regulations may impact acceptable mounting height (pedestrian applications only)
Sensor Temperature Range	-13 – 131 °F 0 – 95% relative humidity, non-condensing
	LCD screen is operational from $14-131^{\circ}F$ . The sensor may still be programmed in colder temperatures, but with the remote control.
Output	
Relay 1	Electromechanical relay (potential and polarity free) Max. contact current: 1 A Max. contact voltage: 30 VAC Adjustable hold time: 0.5 – 9 s
Relay 2	Solid-state relay (potential and polarity free) Max. contact current: 100 mA Max. contact voltage: 42 VDC / 30 VAC
Test / Monitoring Input	Sensitivity: Low: < 1 V High: > 10 V (max. 30 V) Response time on test request: typical < 5 ms
Supply Voltage	12 – 24 VAC ±10%; 12 – 30 VDC ±10% (to be operated from SELV compatible power supplies only)
Power Consumption	< 2.5 W
Noise	< 70 dB
Compliance	ISO 13849 PL «c» CAT. 2 (under the condition that the door control system monitors the sensor at least once per door cycle)

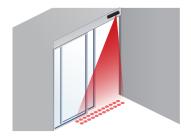


#### **Intelligent Solution**

On-board microprocessor optimizes data analysis, monitors sensor performance, and enables system integration

#### **Standards Compliant**

Fully monitored internally, capable of external monitoring



10IXIOST	Active infrared presence sensor for sliding doors
10ICA	IXIO ceiling accessory
10IMB	IXIO bracket accessory
10URA	Universal rain accessory
10CDA	IXIO curved door accessory
10IXIOSPACER	IXIO spacer (black)
35.1286	IXIO replacement cover (black)
35.1302	IXIO replacement cover (white)
35.1303	IXIO replacement cover (silver)
10RETROFITSPACER	Retrofit Spacer Kit (spacer, 2 ½ " harness, 9" harness)
20.5349	IXIO / ULTIMO control harness (10')
20.5359	Wire harness (30')
10MINIBRACKET	Short, adjustable mounting bracket
10REMOTE	Universal remote control for sensor setup





## **IXIO-ST INDUSTRIAL**

PRESENCE SENSOR FOR SMALL, INTERIOR, INDUSTRIAL DOORS



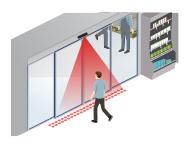
Two 24-spot, high-density infrared, safety curtains providing precise presence detection

#### **Easily Adjustable**

Four visible, red, alignment spots are projected on the ground to assist in precise IR curtain adjustment

#### **Ease of Setup**

Intelligent programming and troubleshooting via a menu-driven LCD





#### **TECHNICAL SPECIFICATIONS**

<b>Detection Mode</b>	Presence
	typical response time: < 200 ms (max: 500 ms)
Technology	Active infrared with background analysis
	Spot: $2'' \times 2''$ (typ)
	Number of spots: max. 24 per curtain
	Number of curtains: 2
Mounting Height	6'6" – 11'6"
	local regulations may impact acceptable mounting
	height (pedestrian applications only)
Sensor Temperature	-13 – 131 °F
Range*	0 – 95% relative humidity, non-condensing
	LCD screen is operational from 14 – 131 °F. The sensor
	may still be programmed in colder temperatures, but
	with the remote control.
Output	
Relay 1	Electromechanical relay (potential and polarity free)
	Max. contact current: 1 A
	Max. contact voltage: 30 VAC
D 1 D	Adjustable hold time: 0.5 – 9 s
Relay 2	Solid-state relay (potential and polarity free)  Max. contact current: 100 mA
	Max. contact current. 100 mA  Max. contact voltage: 42 VDC / 30 VAC
Test / Monitoring Input	Sensitivity:
lest / Monitoring input	Low: < 1 V
	High: > 10 V (max. 30 V)
	Response time on test request: typical < 5 ms
Supply Voltage	12 – 24 VAC ±10%; 12 – 30 VDC ±10%
	(to be operated from SELV compatible power
	supplies only)
Power Consumption	< 2.5 W
Noise	< 70 dB
Degree of Protection	IP54
Compliance	ISO 13849 PL «c» CAT. 2 (under the condition that the door control system monitors the sensor at least once per door cycle)



#### **Intelligent Solution**

On-board microprocessor optimizes data analysis, monitors sensor performance, and enables system integration

#### **Standards Compliant**

Fully monitored internally, capable of external monitoring



10IXIOSTINDUS	Active infrared presence sensor for sliding doors
10ICA	IXIO ceiling accessory
10IMB	IXIO bracket accessory
10URA	Universal rain accessory
10CDA	IXIO curved door accessory
10IXIOSPACER	IXIO spacer (black)
35.1286	IXIO replacement cover (black)
35.1302	IXIO replacement cover (white)
35.1303	IXIO replacement cover (silver)
10RETROFITSPACER	Retrofit Spacer Kit (spacer, 2 ½" harness, 9" harness)
20.5349	IXIO / ULTIMO control harness (10')
20.5359	Wire harness (30')
10MINIBRACKET	Short, adjustable mounting bracket
10REMOTE	Universal remote control for sensor setup



## LZR®-FLATSCAN U950/U952

COMPACT, SINGLE CURTAIN, LASER SCANNER FOR RAW DATA APPLICATIONS

#### **Background Independent**

Background or substrate has limited effect on measurements

#### **LASER-Based Measurements**

Measurement range is up to 8 meters (26 feet)







#### **Uni-Directional or Bi-Directional Standard**

RS485 bus communication (bi-directional)

#### **Superior Object Recognition**

No external illumination of target object necessary as compared to camera systems





#### **TECHNICAL SPECIFICATIONS**

download on our website)  Type asynchronous Interface RS 485 Communication mode full-duplex Transmission speed max. 921,600 bit/sec (configurable) Topology point to point Symbol coding 1 start bit, 1 stop bit, no parity bit Type 8 bits File type little endian, LSB first		
13' (4m) @ 2% remission factor 26'3" (8m) @ 8% remission factor 26'3" (8m) @ 8% remission factor  Number of planes  1 Number of points/plane* Angular resolution* Angular coverage*  Response time  max. 108°  Response time  measurements are refreshed every: 10.75 ms @ angular resolution ≥ 0.74° 43 ms @ angular resolution ≥ 0.74° 23.25 scans/sec. @ angular resolution ≥ 0.74° 23.25 scans/sec. @ angular resolution < 0.74°  Emission characteristics  IR LASER: Wavelength 905 nm; max. output pulse power 25 W; Class 1  Measurement error  ± 1 3/16" @ 13' (±30mm @ 4m) ± 2 3/4" @ 26'3" (±70mm @ 8m)  Repeatability  ± 3/16" @ 13' (±5mm @ 4m) ± 25/64" @ 26'3" (±10mm @ 8m)  Serial communication  see LZR®-FLATSCAN U Protocol (available for download on our website) asynchronous RS 485 Communication mode Transmission speed Topology Symbol coding Type Interface Symbol coding Type File type Byte order  1 tri-colored LED: sensor/communication status  Supply voltage  12 - 24 VDC ±15%  Power consumption  26'3" (2.5m)	Technology	LASER scanner, time-of-flight measurement
Number of points/plane*       max. 400 pts         Angular resolution*       min. 0.18°         Angular coverage*       max. 108°         Response time       measurements are refreshed every: 10.75 ms @ angular resolution ≥ 0.74° 43 ms @ angular resolution ≥ 0.74° 23.25 scans/sec. @ angular resolution ≥ 0.74° 23.25 scans/sec. @ angular resolution < 0.74°         Emission characteristics       IR LASER: Wavelength 905 nm; max. output pulse power 25 W; Class 1         Measurement error       ± 1 3/16" @ 13' (±30mm @ 4m) ± 2 3/4" @ 26'3" (±70mm @ 8m)         Repeatability       ± 3/16" @ 13' (±5mm @ 4m) ± 25/64" @ 26'3" (±10mm @ 8m)         Serial communication       see LZR®-FLATSCAN U Protocol (available for download on our website) asynchronous         Type       asynchronous         Interface       RS 485         Communication mode       full-duplex         Transmission speed       max. 921,600 bit/sec (configurable) point to point         Type       8 bits         File type       little endian, LSB first         Byte order       1 tri-colored LED: sensor/communication status         Supply voltage       12 - 24 VDC ±15%         Power consumption       < 2 W         Peak current at power-on       0.8 A (max. 20 ms @ 24 V)         Cable length	Measurement range	13' (4m) @ 2% remission factor
Angular resolution*       min. 0.18°         Angular coverage*       max. 108°         Response time       measurements are refreshed every: 10.75 ms @ angular resolution ≥ 0.74° 43 ms @ angular resolution ≥ 0.74° 23.25 scans/sec. @ angular resolution ≥ 0.74° 23.25 scans/sec. @ angular resolution < 0.74°	Number of planes	1
Angular coverage*       max. 108°         Response time       measurements are refreshed every: 10.75 ms @ angular resolution ≥ 0.74° 43 ms @ angular resolution < 0.74°	Number of points/plane*	max. 400 pts
Response time       measurements are refreshed every:         10.75 ms @ angular resolution ≥ 0.74°         43 ms @ angular resolution ≥ 0.74°         43 ms @ angular resolution ≥ 0.74°         Scanning rate       93 scans/sec. @ angular resolution ≥ 0.74°         23.25 scans/sec. @ angular resolution < 0.74°	Angular resolution*	min. 0.18°
10.75 ms @ angular resolution ≥ 0.74° 43 ms @ angular resolution < 0.74° 43 ms @ angular resolution < 0.74°  Scanning rate  93 scans/sec. @ angular resolution ≥ 0.74° 23.25 scans/sec. @ angular resolution < 0.74°  Emission characteristics  IR LASER: Wavelength 905 nm; max. output pulse power 25 W; Class 1  Measurement error  ± 1 3/16" @ 13' (±30mm @ 4m) ± 2 3/4" @ 26'3" (±70mm @ 8m)  Repeatability  ± 3/16" @ 13' (±5mm @ 4m) ± 25/64" @ 26'3" (±10mm @ 8m)  Serial communication  See LZR®-FLATSCAN U Protocol (available for download on our website) asynchronous Interface In	Angular coverage*	max. 108°
23.25 scans/sec. @ angular resolution < 0.74°  Emission characteristics  IR LASER: Wavelength 905 nm; max. output pulse power 25 W; Class 1  Measurement error  ± 1 3/16" @ 13' (±30mm @ 4m) ± 2 3/4" @ 26'3" (±70mm @ 8m)  Repeatability  ± 3/16" @ 13' (±5mm @ 4m) ± 25/64" @ 26'3" (±10mm @ 8m)  Serial communication  see LZR®-FLATSCAN U Protocol (available for download on our website) asynchronous Interface RS 485 Communication mode Transmission speed Topology Symbol coding Type Symbol coding Type File type Bitte endian, LSB first Byte order  1 tri-colored LED: sensor/communication status  Supply voltage 12 - 24 VDC ±15%  Power consumption  23.25 scans/sec. @ angular resolution < 0.74° Endition = 1	Response time	10.75 ms @ angular resolution ≥ 0.74°
pulse power 25 W; Class 1  Measurement error  ± 1 3/16" @ 13' (±30mm @ 4m) ± 2 3/4" @ 26'3" (±70mm @ 8m)  Repeatability  ± 3/16" @ 13' (±5mm @ 4m) ± 25/64" @ 26'3" (±10mm @ 8m)  Serial communication  see LZR®-FLATSCAN U Protocol (available for download on our website)  Type Interface Communication mode Transmission speed Topology Symbol coding Type Symbol coding Type Site type Symbol eye Site type Symbol eye Symbol coder Supply voltage  12 - 24 VDC ±15%  Power consumption  24 VDC ±15%  Peak current at power-on  25 (2-1/2" (2.5m)	Scanning rate	3
# 2 3/4" @ 26'3" (±70mm @ 8m)  Repeatability # 3/16" @ 13' (±5mm @ 4m) # ± 25/64" @ 26'3" (±10mm @ 8m)  Serial communication # see LZR®-FLATSCAN U Protocol (available for download on our website)  Type # asynchronous Interface # RS 485 Communication mode Transmission speed # max. 921,600 bit/sec (configurable) Topology # point to point Symbol coding # 1 start bit, 1 stop bit, no parity bit Type # 8 bits File type # little endian, LSB first Byte order # 1 tri-colored LED: sensor/communication status  Supply voltage # 12 - 24 VDC ±15%  Power consumption	Emission characteristics	9 , 1
± 25/64" @ 26'3" (±10mm @ 8m)  Serial communication  see LZR®-FLATSCAN U Protocol (available for download on our website)  asynchronous RS 485 Communication mode Transmission speed Topology Symbol coding Type Spile type Byte order  Supply voltage  Power consumption  ± 25/64" @ 26'3" (±10mm @ 8m)  see LZR®-FLATSCAN U Protocol (available for download on our website)  asynchronous RS 485 full-duplex max. 921,600 bit/sec (configurable) point to point 1 start bit, 1 stop bit, no parity bit 8 bits File type Byte order  1 tri-colored LED: sensor/communication status  Supply voltage  12 - 24 VDC ±15%  Power consumption  2 W  Peak current at power-on  0.8 A (max. 20 ms @ 24 V)  Cable length	Measurement error	
download on our website)  Type asynchronous Interface RS 485 Communication mode Transmission speed max. 921,600 bit/sec (configurable) Topology point to point Symbol coding 1 start bit, 1 stop bit, no parity bit Type 8 bits File type little endian, LSB first Byte order 1 tri-colored LED: sensor/communication status  Supply voltage 12 – 24 VDC ±15%  Power consumption < 2 W  Peak current at power-on 0.8 A (max. 20 ms @ 24 V)  Cable length 8'2-1/2" (2.5m)	Repeatability	,
Power consumption         < 2 W	Interface Communication mode Transmission speed Topology Symbol coding Type File type Byte order	download on our website) asynchronous RS 485 full-duplex max. 921,600 bit/sec (configurable) point to point 1 start bit, 1 stop bit, no parity bit 8 bits little endian, LSB first 1 tri-colored LED: sensor/communication status
Peak current at power-on         0.8 A (max. 20 ms @ 24 V)           Cable length         8'2-1/2" (2.5m)		12 – 24 VDC ±15%
<b>Cable length</b> 8'2-1/2" (2.5m)	Power consumption	< 2 W
, ,	Peak current at power-on	0.8 A (max. 20 ms @ 24 V)
Connector DF11-6DS-2C	Cable length	8'2-1/2" (2.5m)
	Connector	DF11-6DS-2C

Dimensions (U950 only)	5 ½" (L) × 3 ⅓" (H) × 1" (D) [142mm (L) × 85mm (H) × 23mm (D)] mounting bracket + ¼" (7mm)
Material - Color (U950 only)	PC/ASA - Black
Tilt angles (U950 only)	-2 – 6° (with mounting base) 2 – 10° (without mounting base)
Protection degree (U950 only)	IP54 [IEC 60529]
Temperature range	powered: -22 – 140 °F (-30 – 60 °C) unpowered: 14 – 140 °F (-10 – 60 °C)
Humidity	0 – 95% non-condensing
Vibrations	< 2 G
Compliance	2014/30/EU; 2011/65/EU; IEC/EN 60825-1 Laser safety; IEC/EN 61000-6-2; IEC/EN 61000-6-3 EMC

<sup>\*</sup> These parameters can be configured via the RS 485 communication interface. For more information on the existing options, see LZR®-FLATSCAN U Protocol.

10LZRFLATSCANU950LB	LASER scanner for raw data applications (left)
10LZRFLATSCANU950RB	LASER scanner for raw data applications (right)
10LZRFLATSCANU952	LASER scanner without housing for raw data applications



## LZR®-FLATSCAN A

COMPACT, LASER SCANNER FOR FACTORY & LOGISTICS APPLICATIONS

#### **Versatile Sensor Orientation**

Left or right, horizontal or vertical sensor mounting allows for convenient sensor installation based on application needs

#### **Robust Construction**

Metal enclosure and IP66 rating protects sensor in harsh environments







**Compact Design** 

vehicle applications



#### **TECHNICAL SPECIFICATIONS**

Technology	LASER sensor, Time-of-Flight measurement
Detection Mode	Presence
Max. Detection Range	max. 18' × 18' (13' 1/8' @ 5% reflectivity)
Opening Angle	90°
Tilt Angles	±3° (with bracket)
<b>Emission Characteristics</b>	wavelength 905nm; max. output pulse power 25W (CLASS 1)
	wavelength 635nm; max. output CW power 0.95mW (CLASS 2) visible spot
Angular Resolution	0.23° (400 spots within 90°)
LEDs	1 tri-colored LED: detection / output status
Supply Voltage*	12 – 24 VDC ±15%
Power Consumption	≤ 2. W, peak current: 1A
Response Time	max. 50ms (+ output activation delay)
Output  Max. Switching Voltage  Max. Switching Current  Max. Contact Voltage  Max. Contact Current  Max. Switching Power	1 opto (galvanic isolation - polarity free) 42 VAC/VDC 100mA 1 relay (free of potential contact) 42 VAC/VDC 1A (resistive) 30W DC / 60 VAC
Dimensions	5" (L) × 3 ½" (H) × 2" (D) (without bracket)
Color	Black
Protection Degree	IP66 (IEC 60529)
Temperature Range (when powered)	-22 – 140 °F (-30 – 60 °C)
Humidity	0 – 95% non-condensing
Vibrations	< 2 G
Compliance	IEC 60825-1, IEC 60950-1, IEC 61000-6-2, IEC 610006 3, IEC 60529:2001

<sup>\*</sup> If only VAC power is available, a 12V transformer paired with a rectifier must be used. Do not use a 24V transformer and rectifier as this will cause damage to the product.

#### **PRODUCT SERIES**

10LZRFLATSCAN-A	LZR-FLATSCAN A sensor
10FSSMB*	LZR-FLATSCAN S/A bracket
10REMOTE**	BEA Universal Remote Control
10PSMDR2024	DIN rail power supply, 100 – 240 VAC / 24 VDC
10PSST242	Plug-in power supply

Low-profile solution (3.5 inch height) reduces risk of wear and tear in

<sup>\*</sup> Required for installation (sold separately)

<sup>\*\*</sup> Required for installation and adjustment (sold separately)



### LZR®-FLATSCAN S

COMPACT, SINGLE-CURTAIN, LASER SCANNER FOR DOOR, GATE, AND BARRIER APPLICATIONS

#### **Inductive Loop Alternative**

Virtual presence loop ideal for applications where cutting ground for loops is prohibited, impossible, or expensive

#### **Versatile Sensor Orientation**

Left or right, horizontal or vertical sensor mounting allows for convenient sensor installation based on application needs

#### **Robust Construction**

Metal enclosure and IP66 rating protects sensor in harsh environments



#### **Compact Design**

Low-profile solution reduces risk of wear and tear in vehicle applications

#### **Reduce Unwanted Detections**

Fog filter and additional immunity settings allow for field adjustments to mitigate environmental interferences









#### **TECHNICAL SPECIFICATIONS**

Technology	LASER sensor, Time-of-Flight measurement
Detection Mode	Presence
Max. Detection Range	max. 18' × 18' (13' 1/8' @ 5% reflectivity)
Opening Angle	90°
Tilt Angles	±3° (with bracket)
Emission Characteristics	wavelength 905nm; max. output pulse power 25W (CLASS 1) wavelength 635nm; max. output CW power 0.95mW (CLASS 2) visible spot
Angular Resolution	0.23° (400 spots within 90°)
LEDs	1 tri-colored LED: detection / output status
Supply Voltage*	12 – 24 VDC ±15%
<b>Power Consumption</b>	≤ 2. W, peak current: 1A
Response Time	max. 50ms (+ output activation delay)
Output  Max. Switching Voltage Max. Switching Current  Max. Contact Voltage Max. Contact Current	1 opto (galvanic isolation - polarity free) 42 VAC/VDC 100mA 1 relay (free of potential contact) 42 VAC/VDC 1A (resistive)
Max. Switching Power	30W DC / 60 VAC
Dimensions	5" (L) $\times$ 3 $\frac{1}{2}$ " (H) $\times$ 2" (D) (without bracket)
Color	Black
Protection Degree	IP66 (IEC 60529)
Temperature Range (when powered)	-22 – 140 °F (-30 – 60 °C)
Humidity	0 – 95% non-condensing
Vibrations	< 2 G
Compliance	IEC 60825-1, IEC 60950-1, IEC 61000-6-2, IEC 610006-3, IEC 60529:2001

<sup>\*</sup> If only VAC power is available, a 12V transformer paired with a rectifier must be used. Do not use a 24V transformer and rectifier as this will cause damage to the product.

10PSST242	100 – 240 VAC / 24 VDC Plug-in power supply
10PSMDR2024	DIN rail power supply,
10REMOTE**	BEA Universal Remote Control
10FSSMB*	LZR-FLATSCAN S/A bracket
10LZRFLATSCAN-S	LZR-FLATSCAN S sensor

<sup>\*</sup> Required for installation (sold separately)

<sup>\*\*</sup> Required for installation and adjustment (sold separately)



### LZR®-FLATSCAN W

SAFETY SENSOR FOR AUTOMATED WINDOWS



Pattern covers the entire window – including the inner frame borders – up to 13 feet

#### **Easy and Flexible Mounting**

Universal mounting base offers flexible installation and allows a variety of positions to suit niche application needs







#### **Quick and Intuitive Configuration**

The detection field size is defined by a simple hand movement; height and width of the field are automatically calculated

#### **Virtual Push Button**

One or both virtual push buttons can be programmed to activate the opening or closing of the window





#### **TECHNICAL SPECIFICATIONS**

Detection Mode       Presence         Max. Detection Range       13' (diagonal) (e.g. @ 40' width, max. 16')         Number of Curtains       1         Measurement Points       400         Angular Resolution       0.27°         Min. Object Size       ¾" (depending on the settings and the installation)         Optical Characteristics       IR LASER, Class 1 wavelength: 905 nm output power: < 0.1mW         Supply Voltage       12 - 24 VDC ±15%         The equipment must be powered by a SELV limited power source ensuring double insulation between primary voltages and the Equipment supply.         Power Consumption       ≤ 2 W         Typ. Response Time       400 ms         Peak Current at Power-on       0.8A (max. 20 ms @ 24 VDC)         Output       2 solid state relays (galvanic isolation - polarity free) 42 VAC/DC         Max. Switching Voltage Max. Switching Current       100 mA         Input       1 optocoupler (galvanic isolated - polarity free)         Max. Contact Voltage Voltage Threshold       100 mA         Log. H: ~8 VDC Log. L: <3 VDC	Technology	LASER scanner, Time-of-Flight measurement, Background analysis
(e.g. @ 40' width, max. 16')  Number of Curtains  Measurement Points  Angular Resolution  Optical Characteristics  IR LASER, Class 1 wavelength: 905 nm output power: < 0.1mW  Supply Voltage  12 − 24 VDC ±15%  The equipment must be powered by a SELV limited power source ensuring double insulation between primary voltages and the Equipment supply.  The supply current should be limited to 1.5A.  Power Consumption  Ypp. Response Time  Peak Current at Power-on  Output  Max. Switching Voltage Max. Switching Current  100 mA  Input  Input  Max. Contact Voltage Voltage Threshold  Log. H: >8 VDC Log. L: <3 VDC  LED Signals  1 tri-colored LED: detection/output status  Dimensions  5 %" (L) × 3 ¹½₂" (H) × 1 ⅓" (D) (mounting base adds ½")  Materials / Color  PC, ASA / black  Tilt Angles  -2 − 6° (with mounting bracket) 2 − 10° (without mounting bracket) 2 − 10° (without mounting bracket)	<b>Detection Mode</b>	Presence
Measurement Points       400         Angular Resolution       0.27°         Min. Object Size       ¾" (depending on the settings and the installation)         Optical Characteristics       IR LASER, Class 1         wavelength: 905 nm output power: < 0.1mW	Max. Detection Range	
Angular Resolution       0.27°         Min. Object Size       ¾" (depending on the settings and the installation)         Optical Characteristics       IR LASER, Class 1 wavelength: 905 nm output power: < 0.1mW         Supply Voltage       12 − 24 VDC ±15%         The equipment must be powered by a SELV limited power source ensuring double insulation between primary voltages and the Equipment supply.         The supply current should be limited to 1.5A.         Power Consumption       ≤ 2 W         Typ. Response Time       400 ms         Peak Current at Power-on       0.8A (max. 20 ms @ 24 VDC)         Output       2 solid state relays (galvanic isolation - polarity free) 42 VAC/VDC         Max. Switching Voltage Max. Switching Current       VAC/VDC         Max. Contact Voltage Voltage Threshold       1 optocoupler (galvanic isolated - polarity free) 30 V DC (over-voltage protected)         Log. H: >8 VDC Log. L: <3 VDC	Number of Curtains	1
Min. Object Size       ¾" (depending on the settings and the installation)         Optical Characteristics       IR LASER, Class 1 wavelength: 905 nm output power: < 0.1mW         Supply Voltage       12 − 24 VDC ±15% The equipment must be powered by a SELV limited power source ensuring double insulation between primary voltages and the Equipment supply. The supply current should be limited to 1.5A.         Power Consumption       ≤ 2 W         Typ. Response Time       400 ms         Peak Current at Power-on       0.8A (max. 20 ms @ 24 VDC)         Output       2 solid state relays (galvanic isolation - polarity free) 42 VAC/VDC         Max. Switching Voltage Max. Switching Current       VAC/VDC         Max. Contact Voltage Voltage Threshold       1 optocoupler (galvanic isolated - polarity free)         More Voltage Threshold       1 optocoupler (galvanic isolated - polarity free)         LED Signals       1 tri-colored LED: detection/output status         Dimensions       5 ¾" (L) × 3 ½2" (H) × 1 ½" (D) (mounting base adds ½")         Materials / Color       PC, ASA / black         Tilt Angles       -2 - 6° (with mounting bracket)         Indicate Three Indicates Thre	<b>Measurement Points</b>	400
Optical Characteristics  IR LASER, Class 1 wavelength: 905 nm output power: < 0.1mW  Supply Voltage  12 − 24 VDC ±15%  The equipment must be powered by a SELV limited power source ensuring double insulation between primary voltages and the Equipment supply. The supply current should be limited to 1.5A.  Power Consumption  ≤ 2 W  Typ. Response Time  400 ms  Peak Current at Power-on  Output  Max. Switching Voltage Max. Switching Voltage Max. Switching Current  1 optocoupler (galvanic isolation - polarity free) 42  VACA/DC  100 mA  Input  1 optocoupler (galvanic isolated - polarity free) 30 V DC (over-voltage protected) Log. H: >8 VDC Log. L: <3 VDC  LED Signals  1 tri-colored LED: detection/output status  Dimensions  5 ⅓ " (L) × 3 ½ " (H) × 1 ⅓ " (D) (mounting base adds ½")  Materials / Color  PC, ASA / black  Tilt Angles  -2 - 6° (with mounting bracket) 2 - 10° (without mounting bracket)	Angular Resolution	0.27°
wavelength: 905 nm output power: < 0.1mW  Supply Voltage  12 − 24 VDC ±15%  The equipment must be powered by a SELV limited power source ensuring double insulation between primary voltages and the Equipment supply.  The supply current should be limited to 1.5A.  Power Consumption  5 2 W  Typ. Response Time  400 ms  Peak Current at Power-on  Output  Max. Switching Voltage Max. Switching Voltage Max. Switching Current  100 mA  Input  Max. Contact Voltage Voltage Threshold  Log. H: ×8 VDC Log. L: <3 VDC  LED Signals  1 tri-colored LED: detection/output status  Dimensions  5 3/5" (L) × 3 11/52" (H) × 1 1/5" (D) (mounting base adds ½")  Materials / Color  PC, ASA / black  Tilt Angles  -2 − 6° (with mounting bracket) 2 − 10° (without mounting bracket)	Min. Object Size	3/4" (depending on the settings and the installation)
The equipment must be powered by a SELV limited power source ensuring double insulation between primary voltages and the Equipment supply.  The supply current should be limited to 1.5A.  Power Consumption ≤ 2 W  Typ. Response Time 400 ms  Peak Current at Power-on 0.8A (max. 20 ms @ 24 VDC)  Output 2 solid state relays (galvanic isolation - polarity free) 42 VAC/VDC  Max. Switching Voltage Max. Switching Current 100 mA  Input 1 optocoupler (galvanic isolated - polarity free) 30 V DC (over-voltage protected)  Voltage Threshold Log. H: >8 VDC  Log. L: <3 VDC  LED Signals 1 tri-colored LED: detection/output status  Dimensions 5 ¾" (L) × 3 1½2" (H) × 1 ½" (D) (mounting base adds ½")  Materials / Color PC, ASA / black  Tilt Angles -2 -6° (with mounting bracket) 2 - 10° (without mounting bracket)	Optical Characteristics	wavelength: 905 nm
source ensuring double insulation between primary voltages and the Equipment supply.  The supply current should be limited to 1.5A.  Power Consumption  Self W  Typ. Response Time  Peak Current at Power-on  Output  Max. Switching Voltage  Max. Switching Current  Max. Switching Current  Input  Max. Contact Voltage  Voltage Threshold  Voltage Threshold  Log. H: >8 VDC  Log. L: <3 VDC  LED Signals  1 tri-colored LED: detection/output status  Dimensions  5 3/5" (L) × 3 11/52" (H) × 1 1/5" (D)  (mounting base adds ½")  Materials / Color  Tilt Angles  -2 - 6° (with mounting bracket)  2 W  W  Tilt Angles  A00 ms  2 4 VDC)  0.8A (max. 20 ms @ 24 VDC)  0.8A (max. 20 ms @ 24 VDC)  100 max. 20 ms @ 24 VDC)  100 mA  100 mA  100 mA  110 put  1 optocoupler (galvanic isolated - polarity free)  30 V DC (over-voltage protected)  Log. H: >8 VDC  Log. L: <3 VDC  LED Signals  1 tri-colored LED: detection/output status  Dimensions  5 3/5" (L) × 3 11/52" (H) × 1 1/5" (D)  (mounting base adds ½")  Materials / Color  Tilt Angles  -2 - 6° (with mounting bracket)  2 - 10° (without mounting bracket)	Supply Voltage	12 – 24 VDC ±15%
Power Consumption       ≤ 2 W         Typ. Response Time       400 ms         Peak Current at Power-on       0.8A (max. 20 ms @ 24 VDC)         Output       2 solid state relays (galvanic isolation - polarity free) 42 VAC/DC         Max. Switching Current       100 mA         Input       1 optocoupler (galvanic isolated - polarity free)         Max. Contact Voltage Voltage Threshold       30 V DC (over-voltage protected)         Log. H: >8 VDC Log. L: <3 VDC		source ensuring double insulation between primary voltages
Typ. Response Time  Peak Current at Power-on  Output  Max. Switching Voltage Max. Switching Current  Input  Max. Contact Voltage Voltage Threshold  Log. H: >8 VDC  Log. L: <3 VDC  LED Signals  1 tri-colored LED: detection/output status  Dimensions  5 3/6" (L) × 3 11/32" (H) × 1 1/4" (D) (mounting base adds ½")  Materials / Color  Tilt Angles  400 ms  0.8A (max. 20 ms @ 24 VDC)  VAC/VDC  100 mA  1 optocoupler (galvanic isolated - polarity free) 30 V DC (over-voltage protected) Log. H: >8 VDC Log. L: <3 VDC  LED Signals  1 tri-colored LED: detection/output status  Dimensions  5 3/6" (L) × 3 11/32" (H) × 1 1/4" (D) (mounting base adds ½")  Materials / Color  PC, ASA / black  Tilt Angles  -2 - 6° (with mounting bracket) 2 - 10° (without mounting bracket)		The supply current should be limited to 1.5A.
Peak Current at Power-on Output	Power Consumption	≤ 2 W
Output       2 solid state relays (galvanic isolation - polarity free) 42         Max. Switching Current       VAC/VDC         Input       1 optocoupler (galvanic isolated - polarity free)         Max. Contact Voltage       30 V DC (over-voltage protected)         Voltage Threshold       Log. H: >8 VDC         Log. L: <3 VDC	Typ. Response Time	400 ms
Max. Switching Voltage Max. Switching Current  Input  Max. Contact Voltage Voltage Threshold  Log. H: >8 VDC Log. L: <3 VDC  LED Signals  1 tri-colored LED: detection/output status  Dimensions  5 ¾" (L) × 3 ½2" (H) × 1 ½" (D) (mounting base adds ½")  Materials / Color  PC, ASA / black  Tilt Angles  VAC/VDC 100 mA  1 optocoupler (galvanic isolated - polarity free) 30 V DC (over-voltage protected) Log. H: >8 VDC Log. L: <3 VDC  LED Signals  1 tri-colored LED: detection/output status  Dimensions  5 ¾" (L) × 3 ½2" (H) × 1 ½" (D) (mounting base adds ½")  Materials / Color  PC, ASA / black  Tilt Angles  -2 - 6° (with mounting bracket) 2 - 10° (without mounting bracket)	Peak Current at Power-on	0.8A (max. 20 ms @ 24 VDC)
Max. Contact Voltage Voltage Threshold  Log. H: >8 VDC Log. L: <3 VDC  LED Signals  1 tri-colored LED: detection/output status  Dimensions  5 3/8" (L) × 3 11/32" (H) × 1 1/4" (D) (mounting base adds 1/2")  Materials / Color  PC, ASA / black  Tilt Angles  -2 - 6° (with mounting bracket) 2 - 10° (without mounting bracket)	Max. Switching Voltage	VAC/VDC
Dimensions $5 \frac{3}{5}$ " (L) $\times 3 \frac{11}{22}$ " (H) $\times 1 \frac{1}{2}$ " (D) (mounting base adds $\frac{1}{2}$ ")Materials / ColorPC, ASA / blackTilt Angles $-2 - 6^{\circ}$ (with mounting bracket) $2 - 10^{\circ}$ (without mounting bracket)	Max. Contact Voltage	30 V DC (over-voltage protected) Log. H: >8 VDC
(mounting base adds ½")  Materials / Color  PC, ASA / black  Tilt Angles  -2 - 6° (with mounting bracket) 2 - 10° (without mounting bracket)	LED Signals	1 tri-colored LED: detection/output status
Tilt Angles  -2 – 6° (with mounting bracket) 2 – 10° (without mounting bracket)	Dimensions	
2 – 10° (without mounting bracket)	Materials / Color	PC, ASA / black
Protection Degree IP54	Tilt Angles	, ,
Florection Degree 1F54	Protection Degree	IP54
<b>Temperature Range</b> -22 – 140 °F if powered 14 – 140 °F without power	Temperature Range	·

Humidity	0 – 95% non-condensing
Vibrations	< 2 G
Compliance	IEC 60335-2-103 ISO 13849-1 (PL "d"); IEC 61508 (SIL2)

10LZRFLATSCAN-WLB	Safety sensor for automated windows (left)
10LZRFLATSCAN-WRB	Safety sensor for automated windows (right)









### LZR®-FLATSCAN SW

SINGLE CURTAIN, STAND ALONE, DOOR MOUNTED, SAFETY SYSTEM FOR FULL- AND LOW-ENERGY SWING DOORS

#### **Background Independence**

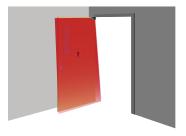
LASER technology ensures independence of all types of flooring (pedi-mats, carpet, reflective flooring, wet surfaces, etc.) and the surrounding environment of the door (guide rails, walls, weather, etc.)

#### **Leading Edge Safety**

Leading-edge safety extends the detection area beyond the leading edge of the door for enhanced safety

#### Hand Gesture Setup™

Easy door-width programming using Hand-Gesture Setup™ reduces configuration time







#### **Reduced Components**

Hub-less system offers fewer components for easier setup and installation

#### **Reduced Uncovered Zone**

LASER technology provides a reduced uncovered zone of down to ¾ inch

#### **UL10B/C Listed**

Fire rated for up to one hour





#### **TECHNICAL SPECIFICATIONS**

Technology	LASER scanner, Time-of-Flight measurement
Detection Mode	Presence
Max. Detection Range	13' (diagonal) with reflectivity of 2% (e.g. at (W) × 5' > max. (H) × 12') see Page 15 of Users Guide
Detection Area	
Door Leaf Safety	90°
Pinch Zone Safety	16°
Angular Resolution	
Door Leaf Safety	1.3°
Pinch Zone Safety	0.2°
Typ. Min. Object Size	
Door Leaf Safety	4" at 13' (in proportion to object distance, DIP $2 = ON$ )
Pinch Zone Safety	$\frac{3}{4}$ " at 13' (in proportion to object distance, DIP 2 = ON)
<b>Emission Characteristics</b>	Wavelength 905 nm;
IR LASER	max. output pulse power 25 W; Class 1
Supply Voltage	12 – 24 VDC ±15% *
Power Consumption	≤ 2 W
Response Time	
Door Leaf Safety	max. 50 ms
Pinch Zone Safety	max. 90 ms
Test Input	30 VDC (max. switching voltage) low < 1 V high > 10 V (voltage threshold)
Output	2 electronic relays (galvanic isolation - polarity free)
Max. Switching Voltage	42 VAC/VDC
Max. Switching Current	100 mA
LED Activity	
Red	Swing-side detection
Green	Approach-side detection
Yellow	Error
Dimensions	5 ½" (W) × 3 ⅓" (H) x 1" (D)
	(mounting bracket adds 1/4")

PC / ASA / Black, White, or Silver
2 – 10° (without mounting bracket)
IP54 (EN 60529)
-22 – 140 °F (if powered)
0 – 95% non-condensing
< 2 G
2°/s
ISO 13849-1 PI "d"/ CAT2; IEC 60825-1; IEC 60950-1; IEC 61000-6-2; IEC 61000-6-3; IEC 62061 SIL 2; UL 10B/C Fire-Rated 1 hour (file #R39071) - black material only

<sup>\*</sup> This sensor is powered by DC voltage only. If only VAC power is available, a 12V transformer paired with a rectifier must be used. Do not use a 24V transformer and rectifier as this will cause damage to the product.









## LZR®-FLATSCAN SW

SINGLE CURTAIN, STAND-ALONE, DOOR MOUNTED, SAFETY SYSTEM FOR FULL- AND LOW-ENERGY SWING DOORS

10LZRFLATSCAN-SWB	Full-energy, swing door, safety system (black)
10LZRFLATSCAN-SWS	Full-energy, swing door, safety system (silver)
10LZRFLATSCAN-SWW	Full-energy, swing door, safety system (white)
10LZRFLATSCAN-LELB	Low-energy, swing door, safety system (left mount, black)
10LZRFLATSCAN-LELS	Low-energy, swing door, safety system (left mount, silver)
10LZRFLATSCAN-LELW	Low-energy, swing door, safety system (left mount, white)
10LZRFLATSCAN-LERB	Low-energy, swing door, safety system (right mount, black)
10LZRFLATSCAN-LERS	Low-energy, swing door, safety system (right mount, silver)
10LZRFLATSCAN-LERW	Low-energy, swing door, safety system (right mount, white)
10LZRFLATSCAN-LB	LZR-FLATSCAN SW sensor (left, black)
10LZRFLATSCAN-LS	LZR-FLATSCAN SW sensor (left, silver)
10LZRFLATSCAN-LW	LZR-FLATSCAN SW sensor (left, white)
10LZRFLATSCAN-RB	LZR-FLATSCAN SW sensor (right, black)
10LZRFLATSCAN-RS	LZR-FLATSCAN SW sensor (right, silver)
10LZRFLATSCAN-RW	LZR-FLATSCAN SW sensor (right, white)
10LZRFLATSCANGDA	LZR-FLATSCAN glass door accessory
20.5433	LZR-FLATSCAN control harness
35.0213	LZR-FLATSCAN SW replacement cover (left, black)
35.0214	LZR-FLATSCAN SW replacement cover (right, black)
35.0220	LZR-FLATSCAN SW replacement cover (left, white)
35.0221	LZR-FLATSCAN SW replacement cover (right, white)
35.0242	LZR-FLATSCAN SW replacement cover (left, silver)
35.0243	LZR-FLATSCAN SW replacement cover (right, silver)
35.1329	LZR-FLATSCAN primary/secondary harness
70.5745	Sentrex retrofit accessory
70.5751	LZR-FLATSCAN spacer (silver)
70.5752	LZR-FLATSCAN spacer (white)
70.5753	LZR-FLATSCAN spacer (black)











### LZR®-FLATSCAN 3D SW

FOUR CURTAIN, STAND ALONE, DOOR MOUNTED, SAFETY SENSOR

#### **Advanced Safety**

The four detection curtains ensure a full-safety coverage of the leaf, hinge area and leading edge of the door, exceeding all industry standards

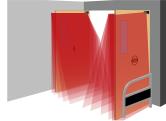
#### **Built-in Knowing Act Device**

Two Virtual Push Buttons per sensor provide a non-contact form of door activation without wiring or installing in-wall switches

#### **Adaptive Sensing**

High-resolution detection curtains create a reliable solution with the ability to self-adapt as the door opens, preventing false detections from guide rails and tight corridors





#### **TECHNICAL SPECIFICATIONS**

Technology	LASER scanner, Time-of-Flight measurement
Detection Mode	Presence
Max. Detection Range	13' (diagonal) with reflectivity of 2% e.g. at 5' width, max. H = 12'
Recommended Mounting Height	75 – 98 "
Opening Angle	
Door Leaf Safety	80°
Pinch Zone Safety	20°
Angular Resolution	
Curtain 1	0.2°
Curtain 2	1°
Curtain 3	1.7°
Curtain 4	2.5°
Tilt Angles	0 – 5°
Typ. Min. Object Size	¾" at 13' in curtain C1
Min. Door Leaf Speed	2°/s
Emission Characteristics (IEC 60825-1)	IR LASER: wavelength 905 nm; output power < 0.1mW; Class 1
Supply Voltage*	12 – 24 VDC ±15% (to be operated from SELV-compatible power supplies only)
Power Consumption	< 2 W
Response Time	Typ. < 120 ms (max. 220 ms)
Output	3 electronic relays (galvanic isolation - polarity free)
Max. Switching Voltage	42 VAC/VDC
Max. Switching Current	100 mA
Dimensions	5 ¾" (L) × 3 ½" (H) × 2 ⅓" (D)
	Mounting base: D + 1 3/4"
	Spacer: D + 1 ½"
Materials - Color	PC/ASA - black
Protection Degree	IP44 (IEC 60529)
LED Signals	1 RGB LED: Detection / Output Status
Temperature Range	-13 – 140 °F
Humidity	0 – 95% non-condensing



#### **Background Independence**

LASER technology ensures independence of all types of flooring (pedi-mats, carpet, reflective flooring, wet surfaces, etc.) and the surrounding environment (weather and lighting)

#### **Easy Setup**

Hub-less system offers fewer components for a more straightforward setup and installation. While Hand Gesture Setup™ reduces configuration time of the detection field width

This sensor is powered by DC voltage only. If only VAC power is available, a 12V transformer paired with a rectifier must be used. Do not use a 24V transformer and rectifier as this will cause damage to the product.





Vibrations	< 2 G
Compliance	ISO 13849-1 PI "d"/ CAT2; IEC 60825-1; IEC 62061 SIL 2 UL10 – file # R39071

10LZRFLATSCAN3D-SWBK	Left and right sensor kit
10LZRFLATSCAN3D-SWBKU	Left and right sensor kit w/ power supply
10LZRFLATSCAN3D-LESWBK	Sensor kit for low-energy doors
10LZRFLATSCAN3D-LELBKIT	Sensor kit for low-energy doors, left
10LZRFLATSCAN3D-LERBKIT	Sensor kit for low-enery doors, right
10LZRFLATSCAN3D-LBK	Single sensor kit, left
10LZRFLATSCAN3D-RBK	Single sensor kit, right
10LZRFLATSCAN3D-LB	Replacement sensor, left
10LZRFLATSCAN3D-RB	Replacement sensor, right
10LZRFLATSCANGDA	LZR-FLATSCAN glass door accessory
35.0287	LZR-FLATSCAN 3D SW replacement cover, left
35.0288	LZR-FLATSCAN 3D SW replacement cover, right
35.0236	LZR-FLATSCAN 3D SW replacement base, left
35.0237	LZR-FLATSCAN 3D SW replacement base, right
70.5753	Spacer
20.5433	LZR-FLATSCAN 3D SW control harness
35.1329	Primary / Secondary Harness
70.5745	Sentrex retrofit accessory







### **LZR®-H100**

LASER SCANNER FOR GATE AND BARRIER APPLICATIONS

#### **Dual Relay Activation**

Two relays allow for activation via motion or presence

#### **Effective Alternative to Loop Detectors**

Ideal for applications where cutting ground for loops is prohibited, impossible, or expensive

#### **Reliable and Constant Detection**

Time-of-Flight, presence based, opto-electronic sensor ensures accurate and immediate detection







#### **Trajectory Detection**

Ability to detect vehicle trajectory during approach and departure

#### **Pedestrian Traffic Rejection**

Ability to detect or ignore pedestrian traffic

#### **Large Detection Field**

Maximum detection field of 32 ft by 32 ft (9 3/4 m by 9 3/4 m)

#### **Ease of Installation**

Teach-in setup via walk path or remote control configuration





#### **TECHNICAL SPECIFICATIONS**

Technology	LASER scanner, Time-of-Flight measurement
<b>Detection Mode</b>	Motion and presence
Max. Detection Range	32' × 32' (9 ¾ m)
Min. Detection Field (safety)	1′8″ (⅓ m)″
Remission Factor	> 2%
Angular Resolution	0.3516°
Emission Characteristics IR LASER	Wavelength 905 nm; output power 0.10mW (CLASS 1)
Red Visible LASER	Wavelength 635 nm; output power 0.95mW (CLASS 2)
Supply Voltage	10 – 35 VDC at sensor terminal
Peak Current at Power-On	1.8 A (max. 80 ms at 35 V)
Power Consumption	< 5 W
Response Time  Motion Detection  Presence Detection	typ. 200 ms (adjustable) typ. 20 ms (max. 80 ms)
Output  Max. Switching Voltage  Max. Switching Current  Switching Time  Output Resistance  Voltage Drop on Output	2 electronic relays (galvanic isolated – polarity free) 35 VDC / 24 VAC 80 mA (resistive) $t^{ON} = 5$ ms; $t^{OFF} = 5$ ms typ 30 $\Omega$ < 0.7 V at 20 mA
<b>LED Activity</b> Blue Orange Red/Green (x2)	Power–on Error status Detection / Output Status (green = no detection, red = detection)
Dimensions	$3.\%$ " (W) × $2.\%$ 4" (H) × 5" (D) mounting bracket: + $\frac{1}{2}$ "
Cable Length	33'
Materials	PC, ASA
Color	Black
Rotation Angle on Bracket	±5° (lockable)

Tilt Angle on Bracket	±3°	
Degree of Protection	NEMA 4 / IP65	
Temperature Range	-22 – 140 °F (-30 – 60 °C) 14 – 140 °F (-10 – 60 °C)	7.1
Humidity	0 – 95% non-condensir	ng
Vibrations	< 2 G	
Pollution on Front Screens	max. 30%; homogenou	IS
Norm Conformity	2006 / 95 / EC: LVD 2004 / 108 / EC: EMC IEC 60825-1:2007 IEC 61000-6-2:2005	2002 / 95 / EC: RoHS IEC 60529:2001 IEC 60950-1:2005 IEC 61000-6-3:2006

10LZRH100	LASER scanner with highly precise detection zone
10LBA	LZR mounting bracket accessory
10INDBRACKET	Industrial mounting bracket
10MINIBRACKET	Short, adjustable mounting bracket
10LHB	LZR housing bracket
10PSMDR2024	DIN rail power supply, 100 – 240 VAC / 24 VDC
10PSST242	Plug-in power supply
10REMOTE	Universal remote control for sensor setup
35.1242	30' harness, 8-conductor









LASER SCANNER FOR INDUSTRIAL AUTOMATION

#### **3-Dimensional Safety Zone**

Four curtains of detection each capable of 360 in by 360 in (30 ft by 30 ft)

#### **Highly Accurate Detections**

Detects objects as small as 2 inches at 30 feet away, depending on application





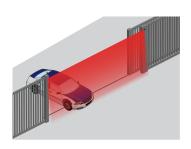


#### **Energy Savings**

Has the ability to ignore dynamic ground conditions and extreme weather

#### **Easily Adjustable**

Three visible LEDs for pattern alignment



#### **TECHNICAL SPECIFICATIONS**

Detection Mode     Motion and presence (EN 12453 Typ. E)       Max. Detection Range     30' x 30'       Remission Factor     > 2%       Emission Characteristics     Wavelength 905 nm; output power 0.10mW (CLASS 1)       Red Visible LASER     Wavelength 635 nm; output power 0.95mW (CLASS 2)       Supply Voltage     10 - 35 VDC at sensor terminal (to be operated from SELV compatible power supplies only)       Peak Current at Power-On     1.8 A (max. 80 ms at 35 V)       Power Consumption     < 5 W       Response Time     Typ. 20 ms; max. 80 ms (+ output activation delay)
Remission Factor   > 2%
Emission Characteristics  IR LASER  Wavelength 905 nm; output power 0.10mW (CLASS 1)  Red Visible LASER  Wavelength 635 nm; output power 0.95mW (CLASS 2)  Supply Voltage  10 – 35 VDC at sensor terminal (to be operated from SELV compatible power supplies only)  Peak Current at Power-On  1.8 A (max. 80 ms at 35 V)  Power Consumption  < 5 W
IR LASER  Wavelength 905 nm; output power 0.10mW (CLASS 1)  Red Visible LASER  Wavelength 635 nm; output power 0.95mW (CLASS 2)  Supply Voltage  10 – 35 VDC at sensor terminal (to be operated from SELV compatible power supplies only)  Peak Current at Power-On  1.8 A (max. 80 ms at 35 V)  Power Consumption  < 5 W
output power 0.10mW (CLASS 1)  Wavelength 635 nm; output power 0.95mW (CLASS 2)  Supply Voltage 10 – 35 VDC at sensor terminal (to be operated from SELV compatible power supplies only)  Peak Current at Power-On 1.8 A (max. 80 ms at 35 V)  Power Consumption < 5 W
Red Visible LASER  Wavelength 635 nm; output power 0.95mW (CLASS 2)  Supply Voltage  10 – 35 VDC at sensor terminal (to be operated from SELV compatible power supplies only)  Peak Current at Power-On  1.8 A (max. 80 ms at 35 V)  Power Consumption  < 5 W
output power 0.95mW (CLASS 2)  Supply Voltage 10 – 35 VDC at sensor terminal (to be operated from SELV compatible power supplies only)  Peak Current at Power-On 1.8 A (max. 80 ms at 35 V)  Power Consumption < 5 W
Supply Voltage     10 – 35 VDC at sensor terminal (to be operated from SELV compatible power supplies only)       Peak Current at Power-On     1.8 A (max. 80 ms at 35 V)       Power Consumption     < 5 W
SELV compatible power supplies only)  Peak Current at Power-On 1.8 A (max. 80 ms at 35 V)  Power Consumption < 5 W
Peak Current at Power-On 1.8 A (max. 80 ms at 35 V) Power Consumption < 5 W
Response Time Typ 20 ms: may 80 ms (+ output activation delay)
response time typ. 20 ms, max. oo ms (+ output activation delay)
Output 2 electronic relays (galvanic isolated – polarity free)
Max. Switching Voltage 35 VDC / 24 VAC
Max. Switching Current 80 mA (resistive)
LED Activity
Blue Power–on
Orange Error status
Red/Green (x2) Detection / Output Status (green = no detection, red = detection)
Dimensions
Housing 5" (W) × 2 ¾"(H) × 3 ½ (D)
10LBA Adds 11/20"
Cable Length 30'
Materials PC, ASA
Color Black
Rotation Angle on Bracket ±5° (lockable)
Tilt Angle on Bracket ±3°
Degree of Protection NEMA 4 / IP65
<b>Temperature Range</b> -22 – 140 °F if powered
14 – 140 °F if unpowered
<b>Humidity</b> 0 – 95% non-condensing
<b>Vibrations</b> < 2 G
<b>Pollution on Front Screens</b> Max. 30%; homogenous

Test Body Dimensions	700 mm × 300 mm × 200 mm (28" × 12" × 8")	
Norm Conformity	2006 / 95 / EC: LVD 2002 / 95 / EC: RoHS 2004 / 108 / EC: EMC 2006 / 42 / EC: MD EN 12453:2000 chapter 5.1.1.6, chapter 5.5.1 Safety device E EN 12978:2009 EN ISO 13849-1:2008 CAT2, PI "d"; EN 60529:2001	IEC 60825-1:2007 EN 60950-1:2005 EN 61000-6-2:2005 EN 61000-6-3:2006 IEC 61496-1:2009 EN 61496-3: 2008 ESPE Type 2 EN 62061:2005 SIL 2

10LZRI30	LASER scanner with highly precise detection zone
10LBA	LZR mounting bracket accessory
10INDBRACKET	Industrial mounting bracket
10MINIBRACKET	Short, adjustable mounting bracket
10REMOTE	Universal remote control for sensor setup
10PSMDR2024	DIN rail power supply, 100 – 240 VAC / 24 VDC
10PS12-24	UL / ULC Listed power supply
10PSVR5T	Voltage regulator, 24 VAC / 24 VDC
35.1242	8-conductor cable (30')







## LZR®-MICROSCAN T

STAND-ALONE, DOOR-MOUNTED, SWING-DOOR, SAFETY SYSTEM



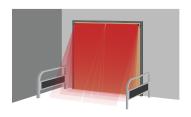
Plug-and-play technology utilizing a centralized hub and intuitive LCD interface greatly reduces installation and setup time

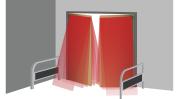
#### **Highly Accurate Detection**

High resolution, self-adapting detection zones, coupled with reduced uncovered zones create the most accurate and reliable safety sensor

#### **Built-in Troubleshooting**

On-board error log ensures easy technical support







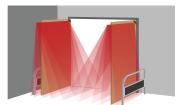
#### **Standards Compliant**

Fully monitored internally, capable of external monitoring

#### **UL10B/C Listed**

Fire-rated for up to three hours





#### **TECHNICAL SPECIFICATIONS**

Technology	LASER scanner, Time-of-Flight measurement
Detection Mode	Presence
Min. / Max. Door Width	20 – 48"
	(measured from leading edge to sensor LED)
Mounting Height	75 – 98"
	(measured from finished floor to sensor LED)
Remission Factor	> 2%
Angular Resolution	2.56°
Testbody	28" (H) × 12" (W) × 8" (D)
<b>Emission Characteristics</b>	
IR LASER	Wavelength 905 nm; maximum output pulse power 35 W (Class I)
Supply Voltage	12 – 30 VDC (15 W Class II)
Power Consumption	< 15 W
Response Time	Typ. 40 ms; max. 80 ms
Output Rating	4 electro-mechanic relays (galvanic isolated - polarity free) All outputs Class 2 supply, 12 – 24 VAC, 12 – 30 VDC, max. 15 W
Input Rating	2 optocouplers (galvanic isolated - polarity free) 12 – 30 VDC, max. 15 W
Test Input	8 – 15 VDC
Temperature Range	-13 – 121 °F (-25 – 55 °C)
Degree of Protection	Hub: IP20 / NEMA 1 Sensor: IP53 / NEMA 3
Humidity	0 – 95%, non-condensing
Vibrations	< 2 G
Materials	PC, ASA
Norm Conformity	EN 60825-1-Eye-safety class 1 IR LASER (905 nm) UL10B/C Fire Rated 3 hrs (file #R39071)
Mounting Angle (rotational)	35° fixed
Tilt Angle	0 – 5° (for angles less than 5°, contact Technical Support)
Pollution on Front Screens	Maximum 30%, homogenous

#### **PRODUCT SERIES**

Single door kit
(1) left sensor, (1) right sensor, (1) hub, (1) primary harness, (1) secondary harness, (1) door control harness, (1) home switch, (1) door loop / cap kit, (1) sensor spacer
(1) 10LZRMICROSCAN1T (1) 10LZRMICROSCAN-UKIT
Pair/Dual-egress door kit
(2) left sensors, (2) right sensors, (1) hub, (2) primary harnesses, (2) secondary harnesses, (2) door control harnesses, (2) home switches, (2) door loops / cap kits, (2) sensor spacers
(1) 10LZRMICROSCAN2T (1) 10LZRMICROSCAN-UKIT
Universal accessory kit converts Single door kit and Pair/Dual-egress door kit into 10MICROSCAN1UT and 10MICROSCAN2UT (1) power supply

#### **OPTIONAL MOUNTING KITS**

10MICROSCANMOUNT	Center-pivot door mounting kit includes:
	(1) Left mounting arm (1) Right mounting arm
10MICROSCAN-Y	Glass/Fire door mounting kit includes:
	(1) 20.5319 - 20" secondary harness (1) 20.5320 - "Y" cable LZR-MICROSCAN-T hub to LZR-MICROSCAN-T harness (1) 70.0202 - 26" standard door cord loop (1) 55.0001 - Door loop end cap for door frame







## LZR®-MICROSCAN T

STAND-ALONE, DOOR-MOUNTED, SWING DOOR, SAFETY SYSTEM



#### **REPLACEMENT COMPONENTS**

10LZRMICROLEFTT	Left LZR-MICROSCAN T sensor	
10LZRMICRORIGHTT	Right LZR-MICROSCAN T sensor	
10LZRMICROSCANHUB	LZR-MICROSCAN T hub	
10DOORSWITCH	Universal Kit ON / OFF / HOLD OPEN switch	
20.5095	Power supply harness	
20.5096	EAGLE harness for LZR-MICROSCAN T	
20.5222	Door control harness	
20.5304	System harness	
20.5310	ON / OFF / HOLD OPEN switch jumper	
20.5319	Secondary harness for 10MICROSCANMOUNT (20")	
20.5320	"Y" cable LZR-MICROSCAN-T hub to LZR-MICROSCAN-T harness	
20.5322	LZR-MICROSCAN T plug-n-play harness for Horton 4190	
20.5347	Hub to LZR-MICROSCAN T harness (30')	
30.5558	Universal kit power supply	
30.5580	2-wire switch	
35.1326	Primary sensor harness	
35.1327	Secondary sensor harness	
41.7922	Left pass-through LZR-MICROSCAN T sensor end cap	
41.7923	Right pass-through LZR-MICROSCAN T sensor end cap	
41.8632	End cap screws	
50.0046	Velcro tabs	
50.0048	Spacer mount screws	
55.0001	Jamb cap kit	
50.1818	Spacer mount screws (metal)	
50.5282	Spacer mount screws (wood)	
50.5283	Home Switch (surface mount)	
70.0202	26" standard door cord loop	
70.5554	LZR-MICROSCAN T sensor spacer	
70.5745	Sentrex retrofit accessory	
35.1321	LZR-MICROSCAN T replacement cover	









LASER SCANNER FOR BUILDING AUTOMATION AND SECURITY

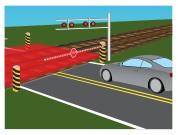
#### **BEA's Largest Detection Field**

Maximum detection range of 82 ft by 82 ft

#### **Safe and Reliable**

External, entrapment protection device capable of monitoring with interfaces building management systems





#### **TECHNICAL SPECIFICATIONS**

Technology	LASER scanner, Time-of-Flight measurement	
<b>Detection Mode</b>	motion and presence	
Detection Range	Default: 33' x 33' at 2% remission factor (max. 82' x 82')	
Angular Resolution	0.3516°	
Min. Detected Object Size (typ.)	0.8 in at 10' 1.4 in at 16' 2.8 in at 33' 6.9 in at 82'	
Emission Characteristics		
IR LASER	wavelength 905 nm; output power 0.10mW (CLASS 1)	
Red visible LASER	wavelength 635 nm; output power 0.95mW (CLASS 2)	
Supply Voltage	10 – 35 VDC at sensor side	
Power Consumption	< 5 W	
Peak Current at Power-on	1.8 A (max. 80 ms at 35 V)	
Cable Length	33'	
Response Time	typ. 20 ms (max. 80 ms) + output activation delay	
Output  Max. switching voltage Max. switching current Switching time Output resistance Voltage drop on output Leakage current	2 electronic relays (galvanic-isolated – polarity-free) 35 VDC / 24 VAC 80 mA (resistive) ton= 5 ms; ton= 5 ms typ 30 $\Omega$ < 0.7 V at 20 mA < 10 $\mu$ A	
Input  Max. contact voltage  Voltage threshold	2 optocouplers (galvanic-isolated – polarity-free) 30 VDC (over-voltage protected) Log. Active High: > 8 VDC Log. Active Low: < 3 VDC	
Response Time		
Monitoring Input	< 5 ms	
LED Activity		
Blue	Power-on	
Orange	Error status	
Red/Green (x2)	Detection / Output Status (green = no detection, red = detection)	
Dimensions	3 5/8" × 2 3/4" × 5" (W × H × D) mounting bracket: + 1/2"	
Material	PC/ASA	
Color	Black	

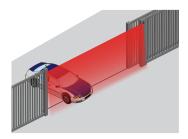


#### **Reduce False Detections**

High immunity to environmental interferences

#### **Eliminates False Detections**

Has the ability to ignore dynamic ground conditions and extreme weather





Mounting Angles on Bracket	-45°, 0°, 45°
Rotation Angles on Bracket	-5 – 5° (lockable)
Tilt Angles on Bracket	-3 – 3°
Protection Degree	NEMA 4 / IP65
Temperature Range	powered: -22 – 140 °F (-30 – 60 °C) unpowered: 14 – 140 °F (-10 – 60 °C)
Humidity	0 – 95% non-condensing
Vibrations	< 2G
Pollution on Front Screen	max. 30%, homogenous
Norm Conformity	2006/95/EC: LVD; 2002/95/EC: RoHS; 2004/108/ EC: EMC; IEC 60529:2001; IEC 60825-1:2007; IEC 60950-1:2005; IEC 61000-6-2:2005; IEC 61000- 6-3:2006

10LZRS600	Presence detection for building automation and security
10LBA	LZR mounting bracket accessory
10INDBRACKET	Industrial mounting bracket
10MINIBRACKET	Short, adjustable mounting bracket
10REMOTE	Universal remote control for sensor setup
10PSMDR2024	DIN rail power supply, 100 – 240 VAC / 24 VDC
10PS12-24	UL / ULC Listed power supply
10PSVR5T	Voltage regulator, 24 VAC / 24 VDC
35.1242	8-conductor cable (30')



## **MICROCELL ONE**

PHOTO BEAMS FOR PEDESTRIAN, AUTOMATIC DOORS

#### **Enhanced Safety on Pedestrian Doors**

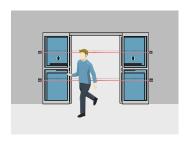
Easy installation on all types of pedestrian doors

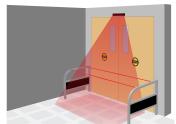
#### **User-Friendly Setup**

LED indicators assist in setting up alignment

#### **Standard Compliant**

Can be mounted as low as 12 inches from the floor





#### **Ideal for Wide Doors**

Maximum range of detection of 15 feet with an  $8^{\circ}$  alignment tolerance

#### **Compatible with BEA's BODYGUARD-T**

Capable of meeting ANSI 156.10 standard for swing-door safety when paired with BEA's BODYGUARD-T

#### **TECHNICAL SPECIFICATIONS**

Technology	Active infrared
Detection Mode	Presence (beam interruption)
Min. Mounting Height	12" from floor
Min. Distance Between Beams	12" (crossed beams)
Min. Range of Detection	3'
Max. Range of Detection	15'
Alignment Tolerance	8°
Response Time	≤ 40 ms
Hold Time	300 ms
Supply Voltage	12 – 24 VAC; ±10% 12 – 24 VDC; -5% / 30%
<b>Current Consumption</b>	< 100 mA
Output Contact Rating Max. Contact Voltage Max. Contact Current Max. Switching Power	1 relay (NC / NO contacts) 50 VAC/VDC 1 A 30 W (DC) / 60 VA (AC)
Operating Temperature	-30 – 131 °F
Immunity Sunlight Incandescent Lamp Electromagnetic Compatibility	75,000 lux 25,000 lux at 8° angle According to 89 / 336 EEC
Dimensions Head Body Head Harness Control Board	< 15/32" (L embed) × 15/32" (Ø) 5/8" (Ø) 3 1/33" (W) × 1 2/25" (H) × 2 1/33" (D)
Cable Length	18' (standard) 32' (optional)
Material	ABS
Degree Of Protection	NEMA 4 / IP65 (beam heads)

10MICROCELL1S	Single safety beam with control box (18' cable)	
10MICROCELL1SL	Single safety beam with control box (32' cable)	
10MICROCELL1D	Double safety beam with control box (18' cable)	
10MICROCELL1DL	Double safety beam with control box (32' cable)	
10MICROCELLADAPTER	<b>R</b> Wiring kit to retrofit BEA MICROCELL beams where Optex beams are currently installed	
	Must order with part number 03.0109 and the 10MICROCONTROL	
10MICROCONTROL	MICROCELL control box	
10MICRO1SADAPT	MICROCELL single beam adapter kit allows for MICROCELL beams to replace Optex beams without running a new cable (1) set of MICROCELL emitter and receiver heads, (1) 10MICROCELLADAPTER, (1) 10MICROCONTROL	
10MICRO1DADAPT	MICROCELL double beam adapter kit allows for MICROCELL beams to replace Optex beams without running a new cable (2) sets of MICROCELL emitters and receiver heads, (2) 10MICROCELLADAPTER, (1) 10MICROCONTROL	
20.0031	3" Emitter and 3" Receiver (ordered as a set)	
20.0045	Jamb cap kit with screws	
20.0055	Emitter and Receiver set (32' cable)	







## **R2E-100**

FOCUSED ACTIVE INFRARED, REQUEST-TO-EXIT SENSOR

## **Standards Compliant**

UL294 and ULCS319 Listed

## **Define Your Tilt Angle**

Adjustable tilt angle from zero to 10°

## **Customizable Detection Zones**

Adjustable detection range from 20 to 48 inches



## **TECHNICAL SPECIFICATIONS**

Detector Type	Focused, active infrared	
Supply Voltage	12 – 24 VAC/VDC; ±10% at 60 Hz	
Current		
Sounder OFF	155 mA	
Sounder MAX VOLUME	200 mA	
Temperature (UL Install)	32 – 120 °F (0 – 49 °C)	
Temperature	-20 - 120 °F (-29 - 49 °C)	
Humidity (ULCS319 Installation)	0 – 93% non-condensing	
(UL294 Installation)  Detection Range*	0 – 85% non-condensing 20 – 48", adjustable via potentiometer	
Relay	2 Form "C" contact sets; 1.3 A at 24 VAC / 30 VDC	
Relay Hold Time	0.5 – 60 s, adjustable via potentiometer	
Sounder	85 dB max, adjustable volume	
LEDs	Green, red, yellow, orange	
REX Input	DRY contact, NO	
Card Reader Input	DRY contact, NC	
Door Position Switch Input	DRY contact, NO	
Dimensions	6 <sup>7</sup> / <sub>10</sub> " (W) × 1 <sup>7</sup> / <sub>10</sub> " (D) × 2" (H)	
Materials	ABS, PC	
Wiring Interface	JST (14-pin) with 4' cable	
Norm Conformity	UL294, ULCS319 FCC Part 15 B	

 $<sup>^{\</sup>star}$  R2E-100 can accommodate swing doors up to 7 feet high.



## **Low-Profile Mounting**

Low-profile sensor mounts on or above the door frame

## **Multiple Inputs**

Three DRY auxiliary inputs: a push button or other request-to-exit device, a card reader or other request-to-enter device, and a door position switch

detector specifically designed for access control applications	10R2E-100	, , ,
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## **SUPERSCAN-T**

DOOR MOUNTED, ACTIVE INFRARED, SAFETY SENSOR



Housing available up to 102 inches in length; can be field cut to desired door width

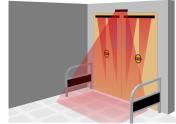
## **ANSI Compliant**

Capable of meeting ANSI 156.10 standard for swing-door safety when coupled with BEA's BODYGUARD-T

## **Functional Design**

Designed to mount at the top of the door to reduce accidental damage







## **TECHNICAL SPECIFICATIONS**

Technology	Active infrared with background suppression	
Detection Mode	Presence	
Measurement of Distance	Triangulation	
Power Supply	12 – 24 VAC/VDC ±10%	
Output Interface; Relay	Relay – max. contact rating: 1A at 30 V (resistive)	
Detection Range	0 – 8'	
Distance Adjustment	2 – 8' (rotating cam with linear adjustment)	
Max. Mounting Height	8'	
<b>Detection Signal Duration</b>	Infinite presence detection	
<b>Detection Time</b>	< 50 ms	
Output Hold Time	Potentiometer range: 0.1 – 4.5 s	
<b>Operating Temperature Range</b>	-30 – 140 °F	
PCB Dimensions Primary Secondary	10.91" (W) × 1.5" (H) 8.75" (W) × 1.5" (H)	
Connector to Door Controller	8-position screw terminal on Primary PCB	
Primary-to-Secondary Connection	Flat-ribbon cable with connectors and key lock	
Max. Number of Secondaries	8	
Functions Selection	Detection mode: NO or NC Normal mode or Background Analysis mode	

## **Customizable**

Can be set to background analysis mode to reduce the chance of false detection from faulty environmental situations

## **Standards Compliant**

Capable of external monitoring





### **PRODUCT SERIES**

See page 39...



## **SUPERSCAN-T INDUSTRIAL**

ACTIVE INFRARED, SAFETY SENSOR



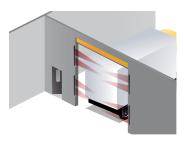
Housing available up to 96 inches; can be field-cut to desired door width

## **User-Defined Detection Zones**

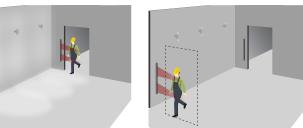
Detection zone of 24 to 96 inches

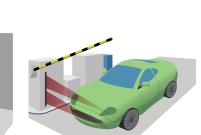
## **Adjustable Detection Zone**

Can be set to background analysis mode to reduce the change of false detection from faulty environmental situations









## **TECHNICAL SPECIFICATIONS**

Technology	Active infrared with background suppression	
<b>Detection Mode</b>	Presence	
Measurement of Distance	Triangulation	
Power Supply	12 – 24 VAC/VDC ±10%	
Output Interface; Relay	Relay – max. contact rating: 1A at 30 V (resistive)	
<b>Detection Range</b>	0 – 8'	
Distance Adjustment	2 – 8' (rotating cam with linear adjustment)	
Max. Mounting Height	8'	
<b>Detection Signal Duration</b>	Infinite presence detection	
<b>Detection Time</b>	< 50 ms	
Output Hold Time	Potentiometer range: 0.1 – 4.5 s	
<b>Operating Temperature Range</b>	-30 – 140 °F	
PCB Dimensions		
Primary	10.91" (W) × 1.5" (H)	
Secondary	8.75" (W) × 1.5" (H)	
Connector to Door Controller	8-position screw terminal on Primary PCB	
Primary-to-Secondary Connection	Flat-ribbon cable with connectors and key lock	
Max. Number of Secondaries	8	
Functions Selection	Detection mode: NO or NC Normal mode or Background Analysis mode	

## **PRODUCT SERIES**

**Customizable Hold Time** 

**Standards Compliant** 

Capable of external monitoring

Relay hold time can be adjusted from 0.1 to 4.5 seconds

See page 39...





## **SUPERSCAN-T / INDUSTRIAL**

ACTIVE INFRARED, SAFETY SENSOR



10SSTI 1 Primary 34 ½" end cap to end cap (for 36" doors)  10SSTICUSTOM 1 Primary Custom Length (13" min.)	
Custom Length (13" min.)	
10SSTI40 1 Primary 40" end cap to end cap (for 42" doors)	
10SSTI42 1 Primary 42" end cap to end cap (for 44" doors)	
10SSTI48 1 Primary 48" end cap to end cap (for 50"+ doors)	
1 Primary + 1 Secondary 34 ½" end cap to end cap (for 36" doors)	
10SSTIICUSTOM 1 Primary + 1 Secondary Custom Length (24 ½" min.)	
10SSTII40 1 Primary + 1 Secondary 40" end cap to end cap (for 42" doors)	
10SSTII42 1 Primary + 1 Secondary 42" end cap to end cap (for 44" doors)	
1 Primary + 1 Secondary 44" end cap to end cap (for 46" doors)	
1 Primary + 1 Secondary 48" end cap to end cap (for 50"+ doors)	
1 Primary + 2 Secondaries 34 ½" end cap to end cap (for 36" doors)	
1 Primary + 2 Secondaries Custom Length (34 ½" min.)	
1 Primary + 3 Secondaries Custom Length (46 ½" min.)	
<b>10SSTSECONDARY</b> SUPERSCAN-T secondary unit (no housing) includes ribbon connector	
<b>10SSTPRIMARY</b> SUPERSCAN-T primary unit (no housing)	
10SSQD Quick disconnect for SUPERSCAN-T one needed per door	

10SSHARDWARE	SUPERSCAN-T hardware kit Includes cord sheath, jamb caps with screws, and end caps with screws	
10CAPKIT	(1) left + (1) right end caps and mounting screws	
30.0015	Ribbon connector cable connects primaries and secondaries	
41.3879	Adjustable mounting clips for primary and secondary	
55.0001	Door cord jamb cap and screw	
70.0025	Aluminum housing, ordered per inch (stocked in 102" lengths)	
70.0048	Aluminum housing cut to 38 $\frac{1}{2}$ " (for a 40" SUPERSCAN-T)	
70.0049	Aluminum housing cut to 40 $\frac{1}{2}$ " (for a 42" SUPERSCAN-T)	
70.0050	Aluminum housing cut to 46 ½" (for a 48" SUPERSCAN-T)	
70.0138	Lens piece, ordered per inch (stocked in 102" lengths)	
70.0202	Standard 26" SUPERSCAN-T door cord sheath, ordered per piece	
70.0203	Lens piece cut to standard 33" lens (for a 34 ½" SUPERSCAN-T)	
70.0304	SUPERSCAN-T hardware kit Includes cord sheath and jamb caps with screws	
70.0319	Lens piece cut to 38 ½" (for a 40" SUPERSCAN-T)	
70.0320	Lens piece cut to 40 ½" (for a 42" SUPERSCAN-T)	
70.0321	Lens piece cut to 46 ½" (for a 48" SUPERSCAN-T)	



## **BEAMBOX**

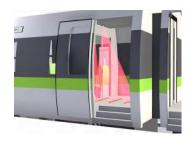
ACTIVE INFRARED, MOTION AND PRESENCE SENSOR

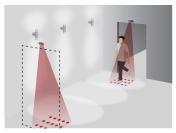
## **Off-Door Presence Detection**

Three rows of five infrared spots ideal for unique off-door applications

## **Multiple Preset Detection Zones**

Four infrared immunity modes and nine unique preset patterns are available



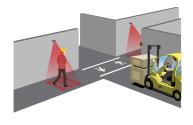


## **Customizable to Your Application**

Typical detection area of 3  $\frac{1}{4}$  by 3  $\frac{1}{4}$  feet when mounted at a height of 7 feet

## **Low-Profile Design**

Recessed mounting for low-profile applications





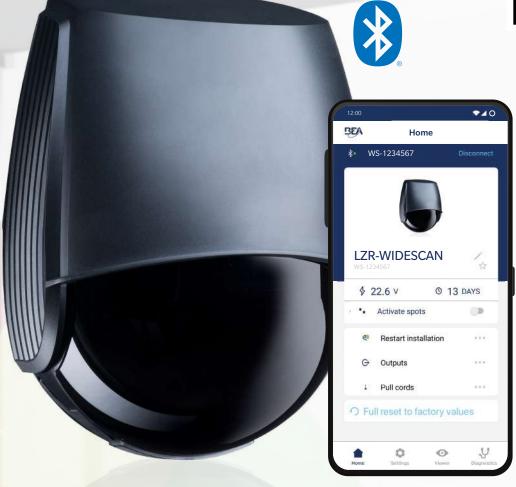
## **TECHNICAL SPECIFICATIONS**

Technology	Active infrared with background analysis	
Detection Mode	Motion and presence	
Optical Features	15 independent IR spots with a diameter of typ. 0.43"	
Maximum Mounting Height	8 1/s' (flush mounting)	
Tilt Angles	0 – 20° vertical in steps of 5°	
<b>Detection Zone</b>	$3\frac{1}{10}$ (W) × $3\frac{9}{10}$ (D) at mounting height $6\frac{1}{2}$ with tilt angle at $20^{\circ}$	
Reaction Time	< 100 ms	
Supply Voltage	12 – 30 VAC ±10%; 12 – 45 VDC ±10%	
Power Consumption	< 3 W (VA)	
Output  Max. Contact Voltage  Max. Contact Current  Max. Switching Power	Relay (free of potential change-over contact) 42 VAC - 60 VDC 1 A (resistive) 30 W (DC) / 60 VA (AC)	
Monitoring Input Input Voltage Input Current	Optocoupled (free of potential) 10 – 24 VDC < 10 mA (at 24 V)	
Connection (Sensor Side)	Unpluggable, integrated 7-pin connector	
Hold Time	0.5 – 9 s (adjustable)	
LEDs	Red and green	
Mains Frequency	50 – 60 Hz	
Temperature Range	-13 – 126 °F (operating); -22 – 140 °F (storage)	
Degree of Protection	IP41	
Dimensions	5 ½" (W) × 1 ½" (H) × 2 ½"	
Weight	3 ½ oz	
Enclosure Material	PC	
Color	Black	
Cable Length	8'	

10BEAMBOX	Uses a 3 × 5 matrix of infrared spots (15 total) where each can be individually activated <i>Monitoring capable</i>
10REMOTE	Universal remote control for sensor setup
10SPOTFINDER	Active-infrared-spot finder







Easily configure sensor settings with the LZR-WIDESCAN mobile app.

The mobile app provides a complete view of sensor settings, from field configurations to immunity.





**READ MORE ON PAGE 49** 







## **IS40/XL**

MOTION AND PRESENCE SENSORS FOR INDUSTRIAL DOORS

## **Energy Savings**

Bidirectional, unidirectional approach, and unidirectional depart microwave detection options

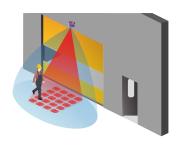
## **Adjustable Detection Settings**

Six modes of detection filtering are available for microwave immunity, as well as pedestrian and parallel traffic rejection

## **Customizable Patterns**

Nine unique infrared patterns capable of highly flexible presence detection in any industrial environment





## **TECHNICAL SPECIFICATIONS**

Technology	Microwave Doppler radar	Active infrared
<b>Detection Mode</b>	Motion	Presence
LED Activity	Green (activation relay)	Red (presence relay)
Transmitter Frequency / Wavelength	24.150 GHz	875 nm
Transmitter Power Density	< 5mW / cm <sup>2</sup>	< 250 mW / m <sup>2</sup>
Max. Detection Field		
IS40	13' × 16 ½'	10' × 10'**
IS40XL	13' × 6 ½'*	7 ½' × 7 ½'***
Output Hold Time	0.5 – 9 s	0.5 s
Min. Detection Speed	2 in/s	0 in/s to activate detection
Tilt Angle	-8 – 22° (relative to sensor face)	15 – 45°
Mains Frequency	50 – 60 Hz	
Power Consumption	< 3.5 W	
Output  Max. Contact Voltage  Max. Contact Current  Max. Switching Power	2 relays (free of potential change-over contact) 42 VAC/VDC 1 A (resistive) 30 W (DC) / 48 VA (AC)	
Installation Height		
IS40	8 – 16′	
IS40XL	6 ½ – 11 ½′	
Temperature Range	-22 – 140 °F	
Dimensions	$3~\%''~(W) \times 4''~(H) \times 5''~(L)$	
Materials	ABS, PC	
Cable Length	32'	
Degree of Protection	NEMA 4 / IP65	
Norm Conformity	R&TTE: 1999 / 5 / EC EMC 2004 / 108 / EEC	

<sup>\*</sup> Determines field size

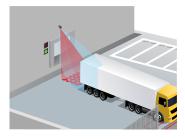


## **Reduce False Detections**

Adjustable infrared immunity modes mitigate environmental disturbances such as subtle door vibrations, light, and sun

## **Programmable Via Remote**

Remote control programming enables user to quickly and safely make changes from the ground (sold separately)



10IS40	Dual technology industrial sensor utilizing microwave motion and active infrared presence detection	
10IS40XL	Dual technology industrial sensor utilizing microwave motion and active infrared presence detection for low mounting heights	
10INDBRACKET	Industrial mounting bracket	
10MINIBRACKET	Short, adjustable mounting bracket	
10SPOTFINDER	Active infrared spotfinder	
10REMOTE	Universal remote control for sensor setup	
35.1566	8-pin conductor cable (30')	

<sup>\*\*</sup> Measured at 30° / Field size 9 / Mounting Height: 16', XL: 11  $\frac{1}{2}$ '

<sup>\*\*\*</sup> Zone detected with the SPOTFINDER (i.e. slightly larger than the effective detection field)







## IXIO-DT1

MOTION AND PRESENCE SENSOR FOR AUTOMATIC, SLIDING DOORS

## **Energy Efficient**

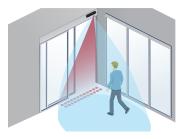
Ten microwave activation sensitivity settings and three infrared safety immunity settings

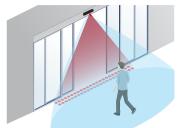
## **Precise Presence Detection**

Two 24 spot, high density, infrared, safety curtains providing precise presence detection

## **Easily Adjustable**

Four visible, red, alignment spots are projected on the ground to assist in precise IR curtain adjustment





**Ease of Setup** 

**Standards Compliant** 

## **TECHNICAL SPECIFICATIONS**

Technology	Microwave Doppler radar	Active infrared
Detection Mode		/ teare initiated
	Motion	Presence
Transmitter Frequency	24.150 GHz	N/A
Transmitter Radiated Power	< 20 dBm EIRP	N/A
<b>Transmitter Power Density</b>	$< 5 \text{ mW} / \text{cm}^2$	N/A
Spot Size	N/A	2" × 2"
Max. Number of Spots	N/A	24 per curtain
Max. Number of Curtains	N/A	2
Output	Electro-mechanical-relay (potential and polarity free)	Solid-state-relay (potential and polarity free)
Max. Contact Voltage Max. Contact Current Hold Time	30 VDC 1 A 0.5 – 9 s (user adjustable)	42 VAC/VDC 400 mA 0.3 – 1 s
Test Input Sensitivity Response time on test	Low: < 1 V High: > 10 V (max. 30 V)	
request:	< 5 ms (typical)	
Supply Voltage	12 – 24 VAC ±10%; 12 – 30 VDC ±10% (to be operated from SELV compatible power supplies only)	
Power Consumption	< 2.5 W	
Mounting Height	6 ½ – 11 ½′	
Temperature Range*	-13 – 131 °F 0 – 95% relative humidity, non-condensing	
Degree of Protection	IP54	
Applicable Directives	R&TTE 1999 / 5 / EC LVD 2006 / 95 / EC MD 2006 / 42 / EC ROHS 2 2011 / 65 / EU	

Dimension	10 <sup>3</sup> /s" (W) × 2 ½" (H) × 2 ½" (D)
Cable Length	10'
Norm Conformity	ISO 13849-1:2008 PL «c» CAT. 2 (under the condition that the door control system monitors the sensor at least once per door cycle) IEC 61496-1:2012 ESPE Type 2

Intelligent programming and troubleshooting via a menu-driven LCD

Fully monitored internally, capable of external monitoring

10IXIODT1	Dual-technology sensor for sliding doors
10ICA	IXIO ceiling accessory
10IMB	IXIO bracket accessory
10URA	Universal rain accessory
10CDA	IXIO curved door accessory
10IXIOSPACER	IXIO spacer (black)
35.1286	IXIO replacement cover (black)
35.1302	IXIO replacement cover (white)
35.1303	IXIO replacement cover (silver)
10RETROFITSPACER	Retrofit Spacer Kit (spacer, 2 ½" harness, 9" harness)
20.5349	IXIO / ULTIMO control harness (10')
20.5359	Wire harness (30')
20.5302	Optex-to-IXIO conversion harness
70.0173	IXIO wide antenna
70.0182	IXIO narrow antenna
10MINIBRACKET	Short, adjustable mounting bracket
10REMOTE	Universal remote control for sensor setup

<sup>\*</sup> LCD screen is operational from 14 to 131 °F. The sensor may still be programmed in colder temperatures, but with the remote control.







## **IXIO-DT1 INDUSTRIAL**

MOTION AND PRESENCE SENSOR FOR INTERIOR, INDUSTRIAL DOORS

## **Energy Efficient**

Ten microwave activation sensitivity settings and three infrared safety immunity settings

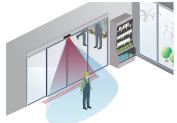
## **Enhanced Accessibility**

PRM mode for applications frequently used by persons with reduced mobility (e.g. wheelchair or elderly traffic)

## **Precise Presence Detection**

Two 24-spot, high-density, infrared safety curtains providing precise presence detection







## **Easily Adjustable**

Four visible, red, alignment spots are projected on the ground to assist in precise IR curtain adjustment

## **Ease of Setup**

Intelligent programming and troubleshooting via a menu-driven LCD

## **Standards Compliant**

Fully monitored internally, capable of external monitoring



## **TECHNICAL SPECIFICATIONS**

Protection

Detection Mode	Motion minimum detection speed: 2 in/s	Presence typical response time: < 200 ms (max. 500 ms)
Technology	Microwave doppler radar Transmitter frequency: 24.150 GHz	Active infrared with background analysis  Spot: 2" × 2" (typ)
	Transmitter radiated power:	Number of spots: max. 24 per curtain
	< 20 dBm EIRP	Number of curtains: 2
	Transmitter power density:	
	< 5 mW/cm	
Mounting Height	6 ½ – 11 ½′	
	local regulations may impact accept	able mounting height (pedestrian
	applications only)	
Sensor	-13 – 131 °F	
Temperature	0 – 95% relative humidity, non-con-	densing
Range	LCD screen is operational from 14 – 131 °F. The sensor may still be programmed in colder temperatures, but with the remote control.	
Output		
Relay 1	Electromechanical relay (potential and polarity free)	
	Max. contact current: 1 A	
	Max. contact voltage: 30 VAC	
	Adjustable hold time: 0.5 – 9 s	
Relay 2	Solid-state relay (potential and polarity free)	
	Max. contact current: 100 mA	
	Max. contact voltage: 42 VDC / 3	30 VAC
Test / Monitoring	Sensitivity:	
Input	Low: < 1 V	
	High: > 10 V (max. 30 V)	
	Response time on test request: typic	cal < 5 ms
Supply Voltage	12 – 24 VAC ±10%; 12 – 30 VDC ±10%	
	(to be operated from SELV compatib	ole power
	supplies only)	
Power	< 2.5 W	
Consumption		
Noise	< 70 dB	
Degree of	IP54	
	11 24	

FCC Certification	FCC: G9B-100606 IC: 4680A-100606
Compliance	ISO 13849 PL «c» CAT. 2 (under the condition that the door control system monitors the sensor at least once per door cycle)

10IXIODT1INDUS	Dual-technology, industrial sensor utilizing microwave motion and active infrared presence sensor. <i>Includes 30' cable</i> .
10ICA	IXIO ceiling accessory
10IMB	IXIO bracket accessory
10URA	Universal rain accessory
10CDA	IXIO curved door accessory
10IXIOSPACER	IXIO spacer (black)
35.1286	IXIO replacement cover (black)
35.1302	IXIO replacement cover (white)
35.1303	IXIO replacement cover (silver)
10RETROFITSPACER	Retrofit Spacer Kit (spacer, 2 ½" harness, 9" harness)
20.5349	IXIO / ULTIMO control harness (10')
20.5359	Wire harness (30')
20.5302	Optex-to-IXIO conversion harness
70.0173	IXIO wide antenna
70.0182	IXIO narrow antenna
10MINIBRACKET	Short, adjustable mounting bracket
10REMOTE	Universal remote control for sensor setup









## IXIO-DT1V

MOTION AND PRESENCE SENSOR WITH CAMERA FOR AUTOMATIC, SLIDING DOORS

## **Additional Camera Functionality**

Provides an SDTV camera that shoots 30 frames of footage per second

## **Easily Integrates**

Integrates with building surveillance systems

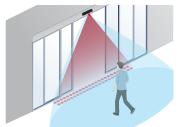
## **Upgrade IXIO In the Field**

Video replacement kit available to upgrade any IXIO in the field

## **Energy Efficient**

Ten microwave, activation sensitivity settings and three infrared safety immunity settings





## **TECHNICAL SPECIFICATIONS (SENSOR)**

Technology	Microwave Doppler radar	Active infrared
Detection Mode	Motion	Presence
Transmitter Frequency	24.150 GHz	N/A
Transmitter Radiated Power	< 20 dBm EIRP	N/A
Transmitter Power Density	< 5 mW / cm <sup>2</sup>	N/A
Spot Size	N/A	2" × 2"
Max. Number of Spots	N/A	24 per curtain
Max. Number of Curtains	N/A	2
Output	Electro-mechanical-relay (potential and polarity free)	Solid-state-relay (potential and polarity free)
Max. Contact Voltage Max. Contact Current Hold Time	30 VDC 1 A 0.5 – 9 s (user adjustable)	42 VAC/VDC 400 mA 0.3 – 1 s
Test Input Sensitivity Response time on test	Low: < 1 V; High: > 10 V (max. 30 V)	
request:	< 5 ms (typical)	
Supply Voltage*	12 – 24 VAC ±10%; 12 –	30 VDC ±10%
Power Consumption	< 2.5 W	
Mounting Height	6 ½ – 11 ½′	
Temperature Range**	-13 – 131 °F 0 – 95% relative humidity	, non-condensing
Degree of Protection	IP54	
Norm Conformity	R&TTE 1999 / 5 / EC LVD 2006 / 95 / EC	MD 2006 / 42 / EC ROHS 2 2011 / 65 / EU
Dimension	10 <sup>3</sup> / <sub>5</sub> " (W) × 2 ½" (H) × 2	2 1/4" (D)
Cable Length	10'	

 $<sup>\,^{\</sup>star}\,$  To be operated from SELV-compatible power supplies only



## **Enhanced Accessibility**

PRM mode for applications frequently used by persons with reduced mobility (e.g. wheelchair or elderly traffic)

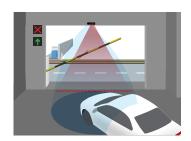
### **Precise Presence Detection**

Two 24-spot, high-density, infrared safety curtains providing precise presence detection

## **Standards Compliant**

Fully monitored internally, capable of external monitoring





## **TECHNICAL SPECIFICATIONS (CAMERA)**

Voltage Regulator	6.6 – 36 VDC ±10%, 6 – 28 VAC ±10%
Operating Temperature	-22 – 140 °F (max. RH: 95%)
Video Output	1.0 (Vp-p) / 75Ω
Image Sensor	CMOS
<b>Horizontal Resolution</b>	480 TVL
NTSC Output	720 (H) × 480 (W)
Sync System	Inter-Sync
Frame Rate	30 fps
Minimum Illumination	0.01 LUX
AE Control	Auto
Gain Control	Auto
<b>Electronic Shutter</b>	1 s ~ 1/10,000 s
S/N Ratio	> 50 dB
AWB	Auto

10IXIODT1V	IXIO-DT1 with integrated video
10IMB	IXIO bracket accessory
10CDA	IXIO curved door accessory
10IXIOSPACER	IXIO spacer (black)
10RETROFITSPACER	Retrofit Spacer Kit (spacer, 2 ½ " harness, 9 " harness)
20.5349	IXIO / ULTIMO control harness (10')
20.5359	Wire harness (30')
20.2009	IXIO-DT1V camera harness and power supply (8')
70.0173	IXIO wide antenna
70.0182	IXIO narrow antenna
10MINIBRACKET	Short, adjustable mounting bracket
10REMOTE	Universal remote control for sensor setup

<sup>\*\*</sup> LCD screen is operational from 14 to 131 °F. The sensor may still be programmed in colder temperatures, but with the remote control.



## ULTIMO

AUTOMATIC SLIDING DOOR SENSOR WITH EXTENDED / ENHANCED SAFETY









Enhanced Safety



Easy Installation



**Convenient Programming** 



Standards Compliant

READ MORE ON PAGE 50



## LZR®-WIDESCAN

MOTION, PRESENCE, AND SAFETY SENSOR FOR INDUSTRIAL DOORS

## **Easy Setup**

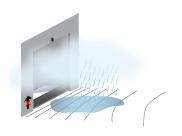
Utilize mobile app to easily configure sensor settings (available on the Apple App Store and Google Play Store)

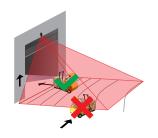
## **Energy Efficient**

Promotes energy savings by reducing false detections and unnecessary door cycling, helping to regulate HVAC

## **Virtual Pull Cord**

Virtual pull-cord function can differentiate between pedestrian and vehicle traffic and can provide pulse-on-stop activation





## **TECHNICAL SPECIFICATIONS**

Technology	LASER scanner, Time-of-Flight measurement (7 LASER curtains)
<b>Detection Mode</b>	Motion, presence, height, and speed
Max. Detection Field	Width: 1.2 x mounting height Depth: 1.2 x mounting height (adjustable depending on user settings)
Thickness of First Curtain	1/4"
Typ. Mounting Height	6'6" - 32'
Min. Reflectivity Factor	> 2% (of floor and object) (measured at max. 19'6" in safety field)
Typ. Minimum Object Size	6" at 19'6" (in proportion to object distance)
Testbody	27 ½" × 11 ¾" × 7 ¾"
Emission Characteristics IR LASER Red Visible LASER	Wavelength 905 nm; output power 0.10mW (CLASS 1) Wavelength 635 nm; output power 0.95mW (CLASS 2)
Supply Voltage	12 – 24 VAC -10/+20% 12 – 30 VDC ±10% at sensor terminal
Power Consumption	< 2.5 W (heating = OFF) < 10 W, max 15 W (heating = ECO or AUTO)
Response Time	Typ. 230 ms; Max. 800 ms (depending on immunity settings)
Output	2 solid-state relays (galvanic isolation, polarity free) 24 VAC / 30 VDC (max. switching voltage) 100 mA (max. switching current) - in switching mode: NO / NC - in frequency mode: pulsed signal (f= 100 Hz ±10%)
	1 electro-mechanic relay (galvanic isolation, polarity free) 42 VAC/VDC (max. switching voltage) 500 mA (max. switching current)
Input	30 VDC (max. switching voltage) low < 1 V high > 10 V (voltage threshold)
Bluetooth Communication	Operating bandwidth: 2402 - 2480 MHz Max. transmitted power: 12 dBm

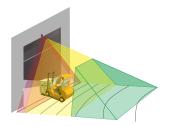


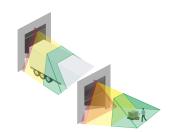
## **Alternative Solution**

Ideal for replacing costly and labor-intensive induction loop and pull-cord solutions

## **Visible Spots**

Two visible LASER alignment spots ensure accurate pattern placement





Dimensions	7 <sup>3</sup> / <sub>4</sub> " (H) × 6" (W) × 4" (D) (approx.)
Materials / Color	PC, ASA / Black
Protection Degree	NEMA 4 / IP65
Temperature Range	-22 – 140 °F
Rotation Angles on Bracket	45° to the right 15° to the left (both directions lockable)
Tilt Angles on Bracket	-10 – 5°
LED Activity	2 tri-colored LED: output status / remote control response / error signals 1 blue LED: Bluetooth status
Compliance	EN 300 328 V2.2.2, EN 301 489-1 V2.2.2, EN 301 489-17 V3.2.0, EN 60825-1:2014, EN 62311:2008; CSA/UL62368-1

10LZRWIDESCAN	Motion, presence, and safety sensor
10WBA	Universal mounting bracket
10WBAMOUNT	Universal mounting bracket plate
10INDBRACKET	Industrial mounting bracket ADAPTER PLATE KIT (10.1311) IS REQUIRED
10MINIBRACKET	Short, adjustable mounting bracket
10.1311	Adapter plate kit
35.1554	30' cable
35.1555	50' cable
41.8838	LZR-WIDESCAN replacement base
35.0245	LZR-WIDESCAN replacement cover
10PSMDR2024	DIN rail power supply, 100 – 240 VAC / 24 VDC
10REMOTE	Universal remote control for sensor setup







## **ULTIMO**

AUTOMATIC SLIDING DOOR SENSOR WITH EXTENDED AND ENHANCED SAFETY

## **Enhanced Safety**

Positioning the inner, infrared safety curtain through the threshold allows for sustained presence detection in the door opening

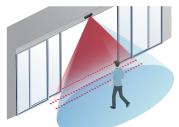
When directed through the threshold, the inner, infrared safety curtain provides presence detection while the door is fully open and partial detection during the closing door cycle

## **Easy Installation**

Eight visible, red, alignment spots are projected onto the ground, verifying the location of the infrared curtains and helping to increase the accuracy of setup

Sensors automatically synchronize infrared frequency with ULTI-SYNC functionality, streamlining installation and retrofit applications\*





## **TECHNICAL SPECIFICATIONS**

Mounting Height	6'6" – 11'6"
Detection Mode	Motion and presence
Technology	Microwave Doppler radar and active infrared (AIR) with background analysis
Radar Detection Speed (min)	2 in/s
AIR Response Time (typ.)	< 200 ms (max. 500 ms)
Radar Transmitter	
Frequency	24.150 GHz
Radiated Power	< 20 dBM EIRP
Power Density	$< 5 \text{ mW} / \text{cm}^2$
Lobe Angles	0 – 45° (typical adjustment), default 25°
AIR Spots	
Size	$2'' \times 2''$ (typ.)
Number of Spots	max. 32 per curtain
Number of Curtains	3
Curtain Angles	-3 – 11°, default 0°
Relay Output 1	Electro-mechanical-relay (potential and polarity free)
Max. Contact Voltage	30 VDC
Max. Contact Current	1 A
Hold Time	0.5 – 9 s
Optofet Output 2	Solid-state-relay (potential and polarity free)
Max. Contact Voltage	42 VAC/VDC
Max. Contact Current	400 mA
Hold Time	0.3 – 1 s
Test / Monitoring Input	
Sensitivity	Low: < 1 V; High: > 10 V (max. 30 V)
Response Time on Request	Typical: < 5 ms
Supply Voltage	12 – 24 VAC ±10%
	12 – 30 VDC ±10%
Power Consumption	< 3.2 W
· · · · · · · · · · · · · · · · · · ·	



## **Convenient Programming**

Easily define the microwave pattern shape, adjust the infrared curtain width, and review troubleshooting diagnostics via a menudriven LCD

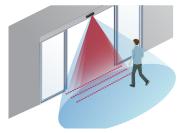
## **Extended Safety**

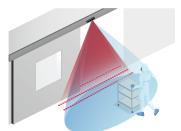
Three infrared curtains offer deeper and broader safety coverage in front of the door panels

## **Standards Compliant**

Fully monitored internally, capable of external monitoring complying with ANSI 156.10

\* ULTI-SYNC is cross-compatible with BEA and other sliding door sensors on the market.





Temperature Range*	-13 – 131 °F 0 – 95% relative humidity, non-condensing
Cable Length / Gauge	10' / 26 AWG
Degree of Protection	IP54
Norm Conformity	R&TTE 1999 / 5 / EC MD 2006 / 42 / EC LVD 2006 / 95 / EC ROHS 2 2011 / 65 / EU

\* LCD screen is operational from 14 to 131 °F. The sensor may still be programmed in colder temperatures, but with the remote control.

10ULTIMO	Dual-technology sensor for sliding doors	
10RETROFITSPACER	Retrofit Spacer Kit (spacer, 2 ½" harness, 9" harness)	
10ULTIMOSPACER	ULTIMO spacer	
10URA	Universal rain accessory	
10UMB	ULTIMO mounting bracket	
10.1351	ULTIMO replacement cover	
20.5349	IXIO / ULTIMO control harness (10')	
10REMOTE	Universal remote control for sensor setup	





## LZR®-U920 / U921

COMPACT, RAW DATA, LASER SCANNER

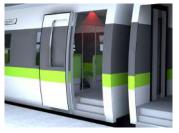
## **Background Independent**

Background or substrate has limited effect on measurements

## **LASER-Based Measurements**

Measurement range: up to 213 ft (65 m)







## **Uni-Directional or Bi-Directional**

Standard RS485 bus communication (bi-directional)

## **Superior Object Recognition**

No external illumination of target object necessary as compared to camera systems





## **TECHNICAL SPECIFICATIONS**

Technology	LASER scanner, Time-of-Flight measurement
Measurement Range	30' (10 m) at 2% remission factor 98' (30 m) at 10% remission factor
	213' (65 m) max.
Number of Points/Plane	Max. 274
Number of Planes	
LZR®-U920	4
LZR®-U921	1
Angular Resolution	Max. 0.3516°
Angular Coverage	Max. 96°
Rotating Speed	900 turns / min
Scanning Frequency	
LZR®-U920	15 Hz
LZR®-U921	60 Hz
Serial Communication	
Туре	Asynchronous
Interface	RS 485
Communication Mode	Half-duplex (U920,U921)
Data Transmission Speed	460800 bit / sec (max. 921600 bit / sec)
Topology	Point-to-point
Symbol Coding	1 start bit, 1 stop bit, no parity bit
File Type	8 bits
Remission Factor	> 2 %
Emission Characteristics	
IR LASER	Wavelength 905 nm;
	output power 0.10mW (CLASS 1)
Visible LASER	Wavelength 635 nm;
	output power 0.95mW (CLASS 2)
Peak Current at Power-on	1.8 A (max. 80 ms at 35 V)
Supply Voltage	10 – 35 VDC at sensor side
Power Consumption	< 5 W
Cable Length	10'
LED Activity	
Blue	Power-on status
Orange	Error status
Bi-colored (x2)	Function status
Dimensions	5" (W) × 2 ¾" (H) × 3 ¾" (D)
Materials	PC, ASA

Degree of Protection	NEMA 4 / IP65
Temperature Range	-22 – 40 °F (-30 – 60 °C) if powered
	14 - 140 °F (-10 - 60 °C) if unpowered
Humidity	0 – 95% non-condensing
Vibrations	< 2 G
Norm Conformity	2006 / 95 / EC: LVD
•	2011 / 65 / EU: RoHS 2
	2004 / 108 / EC: EMC
	EN 60529:2001
	IEC 60825-1:2007 Laser Class 1&3R
	EN 60950-1:2005
	EN 61000-6-2:2005 EMC - Industrial level
	EN 61000-6-3:2006 EMC - Commercial Level

10LZRU920	Bidirectional, four-curtain sensor
10LZRU921	Bidirectional, one-curtain sensor
10PSMDR2024	DIN rail power supply, 100 – 240 VAC / 24 VDC
10PSVR5T	Voltage regulator, 24 VAC / 24 VDC

## LASER SCANNER FOR VIRTUAL LOOP APPLICATIONS



BEA's LZR®-H100 is a LASER-based Time-of-Flight sensor designed for gate and barrier applications. This solution provides four LASER-based curtains, offering a three dimensional detection zone for accurate object detection. Its detection curtains are highly-configurable and can be set up for activation and presence detection in vehicle sensing applications.

The LZR-H100 is an effective alternative to induction loops and is housed in an IP65 rated enclosure, further ensuring its performance in outdoor environments.

## **READ MORE ON PAGE 30**



HIGH PRESICION PRESENCE



GROUND LOOP ALTERNATIVE



INDOOR / OUTDOOR INSTALLATION



TRAJECTORY DETECTION





## **BR2-900**

2-RELAY, LOGIC MODULE + 900 MHz, WIRELESS TECHNOLOGY

## **Flexible**

Sequenced or simultaneous relay activation for application flexibility

### Convenient

2 AMP relays allow the direct release of an electric locking device wirelessly, eliminating the need for a separate logic module or isolation relay





## Brz-good Resident Linder Resident Resid

## **Feature Rich**

Extended Hold Mode allows wireless push plates to function like hardwired push plates (if push plate is held, relay does not time out)

## **Saves Time and Money**

Wireless functionality eliminates the need to run input wires directly to the logic module





## **TECHNICAL SPECIFICATIONS**

Supply Voltage	12 – 24 VAC/VDC ±10%
<b>Current Consumption</b>	45 mA DC
	75 mA AC
Frequency	908 – 918 MHz (frequency hooping)
<b>Emitted Radio Power</b>	-25 dBm (TX)
Power Consumption	0.5 – 1.5 W
<b>Programmable Transmitters</b>	75
Per Receiver	(unlimited for 900 MHz Universal Transmitter)
Temperature Rating	-22 – 158 °F (-30 – 70 °C)
Input	
Day / Night (24 hr)	DRY contact
AUX	DRY contact
Contact Rating	Relay 1 DPDT / Relay 2 DPDT
	2 A at 30 VDC or 2 A at 24 VAC
LED Activity	
Blue	Relay 1 activation
White	Relay 2 activation
Red	Radio frequency / Learn
Tri-color	Signal strength
Certification	FCC, IC
Dimensions	5 1/5" (W) × 1" (H) × 2 1/5" (D)
Housing	ABS (white translucent)

10BR2-900	2-relay logic module
10TD900HH1	Handheld transmitter, 900 MHz, 1-button (3-volt battery)
10TD900HH2	Handheld transmitter, 900 MHz, 2-button (3-volt battery)
10TD900HH3	Handheld transmitter, 900 MHz, 3-button (3-volt battery)
10TD900HH4	Handheld transmitter, 900 MHz, 4-button (3-volt battery)
10TD900HH1U	Universal, 900 MHz transmitter
10Т900РВ	Wired, 900 MHz transmitter with flag connector (2 AAA batteries)
109TD900TR	900 MHz, touchless-retrofit transmitter



## **BR3-X**

PROGRAMMABLE, 3-RELAY, LOGIC MODULE

## **Integrated Relays**

Two 3 AMP relays and one 1 AMP relay, all with built-in surge suppression, eliminate the need for external components when installing some electric locking devices

## **Customizable**

Versatility with 13 programmable logic functions





## **TECHNICAL SPECIFICATIONS**

Supply Voltage	12 – 24 VAC/VDC ±10%
Power Consumption	30 – 130 mA; DRY Output
Temperature Range*	-15 – 150 °F
Dimensions	5 ½" (W) × 1" (H) × 2 ½" (D)
Relay Hold Time	Up to 60 seconds per relay
Delay Between Relays	Up to 60 seconds per relay with $\frac{1}{4}$ , $\frac{1}{2}$ and $\frac{3}{4}$ second options
Housing Material	ABS
Input Specification Inputs 1, 2, 3, 4 WET Input	DRY contact 5 – 24 VAC/VDC ±10%
Contact Rating Relay 1 (DRY) Relay 1 (WET) Relay 2 Relay 3	3 A at 24 VAC / 30 VDC 1 A 3 A at 24 VAC / 30 VDC 1 A at 24 VAC / 30 VDC

<sup>\*</sup> If powered by AC voltage and using WET output to convert to DC voltage and current draw of device is greater than 0.9 A, the upper temperature range is 130 °F.



### **On-Board Power**

WET output with AC/DC voltage for powering an electric locking device directly from the module

## **Intuitive Programming**

Two-button programming combined with dual seven-segment display provides simple setup





## **PRODUCT SERIES**

## 10BR3X

Programmable 3-relay logic module offering 13 functions, including day/night mode and normally locked and normally unlocked restroom modes

See page 103 for Restroom Kit and page 102 for Emergency Add-On Kit.

## **LOCK-OUT MODULES**

SWING-DOOR LOGIC USED WITH OVERHEAD PRESENCE SENSORS

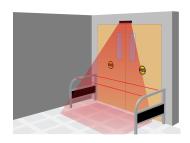


## **BODYGUARD-T Inhibition**

Used to inhibit header-mounted safety sensors (BODYGUARD-T) while door is in closing cycle

## **Built-in Door Position Recognition**

Analyzes motor voltage



## **Optional Safety Beam Input**

To override inhibit signal during door closing

## **TECHNICAL SPECIFICATIONS**

Power Supply	12 – 24 VAC / 15 – 24 VDC
Operating Frequency	4 MHz (microprocessor)
Power Consumption	10 mA at rest, 50 mA max.
Output	2x SPST relays
Max. Voltage - Relay Contact	60 VDC / 120 VAC
Max. Current - Relay Contacts	
(both)	2 ADC, 0.5 AAC

10LO21	Lock-out relay
10LO21P	Universal lock-out relay for PARALLAX packages
10LE21	Low-energy lockout module
15.0075	Harness for LO21 and LO21P





## **MATRIX FAMILY**

UL LISTED, LOOP DETECTORS

## **Two Loop Models Available**

Available in single- or dual-loop models

## **Dual Outputs**

Two relay outputs

## **Vehicle Detection, Direction, and Counting**

Ideal for vehicle directionality and sequencing applications











## **Easy to Adjust**

Settings are adjusted via two ease-to-use potentiometers

### **Feature Rich**

Pulse-on-entry and pulse-on-exit presence detection





## **TECHNICAL SPECIFICATIONS**

MATRIX-3D

Tuning	Automatic
Connector	11-pin male (86CP11)
Presence Time	1 min – infinity
Pulse Time Output	100 ms or 500 ms
LED Activity	
Green	Power
Red	Loop Status 1 / Loop Status 2
Frequency Range	20 kHz – 130 kHz
Frequency Steps	
Single Loop	4
Double Loop	2 (for each loop)
Sensitivity (ΔL/L)	0.005 - 0.5%
Reaction Time	
Single Loop	25 ms
Double Loop	50 ms (each channel)
Setup Time After Configuration	2 s max by channel
Power Supply	12 - 24 VAC/VDC ±10%
(depending on model)	115 VAC ±10%
Power Frequency	48 – 62 Hz
Power Consumption	< 2.5 W
Temperature Range	-22 – 158 °F (-30 – 70 °C)
Protections	Loop insulation transformer
	Zener diodes
	Gas discharge clamping
Inductance Range	20 – 1000 μΗ
Connection	86CP11 (standard 11-pin, round)
Relay Outputs	2 (free potential change-over contact)
Max. Contact Voltage	230 VAC
Max. Contact Current	5 A (resistive)
Setup Time at Power On	
MATRIXD/S	8 s max by channel
MATRIXIIS	8 s max by channel
MATRIX-3S	1.6 s max by channel

2.2 s max by channel

Norm Conformity	R&TTE: 1999 / 5 / EC EMC: 89 / 336 / EEC EMC: 89 / 336 / EE EMC: 2004 / 108 / EC FCC: 47 CFR 15 IC: RSS-210 ISSUE 5 UL Listed equipment for UL508
Degree of Protection	IP40
Weight	7 oz
Dimensions	1 ½" (W) × 3" (H) × 3" (D)

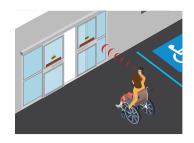
10MATRIXD110	Dual-loop detector (110 – 120 VAC)
10MATRIXD1224	Dual-loop detector (12 – 24 VAC)
10MATRIXIIS110	Single-loop detector (110 – 120 VAC)
10MATRIXIIS1224	Single-loop detector (12 – 24 VAC)
10MATRIX-3-D	Dual-loop detector (12 – 24 VAC) socket NOT included
10MATRIX-3-S	Single-loop detector (12 – 24 VAC) socket NOT included
10MATRIXHARN	MATRIX harness, 11-pin, 72" (6') length
10PSMDR2024	DIN rail power supply, 100 – 240 VAC / 24 VDC
10PSST242	Plug-in power supply
70.0262	11-pin, socket-based, DIN rail





## **300 MHz FAMILY**

300 MHz, WIRELESS TRANSMITTERS AND RECEIVERS





## **TECHNICAL SPECIFICATIONS**

Frequency	300 MHz
Radio Control Type	Analog
Input Voltage	24 VAC/VDC
Operating Temperature	14 – 131 °F (-10 – 55 °C)
Setup	10 DIP switch, access code programming
Power	
10T300HHX	(1) 9-volt battery
10T300KEYCHAIN	(1) 12-volt battery
10T300MINIPB	(1) 12-volt battery
10T300PB	(1) 9-volt battery
Receiver Dimensions	
Without Flange	$4 \%_{10}$ " (L) × 3 $\%$ " (W) × 1 $\%$ " (H)
With Flange	$5 \frac{2}{5}$ " (L) × 3 $\frac{1}{5}$ " (W) × 1 $\frac{2}{5}$ " (H)
Norm Conformity	CE, FCC, IC



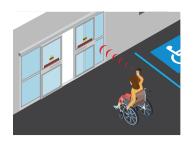
10R300	300 MHz analog receiver
10T300HH	Handheld transmitter, 1-button (9-volt battery)
10T300HHDBL	Handheld transmitter, 2-button (9-volt battery)
10T300HH4	Handheld transmitter, 4-button (9-volt battery)
10T300KEYCHAIN	Keychain transmitter, 1-button (12-volt battery)
10T300MINIPB	Miniature, hardwired transmitter, 1-button (12-volt battery)
10T300PB	Wired transmitter, no case, with flag connectors (9-volt battery)
70.0260	Energizer battery, 12-volt
70.0261	Energizer battery, 9-volt





## **433 MHz FAMILY**

433 MHz, WIRELESS TRANSMITTERS AND RECEIVERS





## **TECHNICAL SPECIFICATIONS**

Frequency	433 MHz
Radio Control Type	Digital
Emitted Radio Power	-28.7 dBm (transmitter)
Power Consumption	3mA (transmitter); 30mA (receiver)
Power	
Hardwire	1 9-volt or 3-volt battery
Handheld	1 3-volt battery
Input Voltage	12 – 24 VAC/VDC (receiver)
Contact Rating	1.0 A at 30 VDC
	0.5 A at 125 VAC
	0.3 A at 60 VDC
Operating Temperature	14 – 131 °F (-10 – 55 °C)
Capacity	100 programmed transmitters (per receiver)
LED Activity	
Red	Receiver/Transmitter learn
Blue	Relay activity
Dimensions	
Receiver	$2 \frac{1}{8}$ " (W) × 1" (H) × $2 \frac{3}{4}$ " (D)
Transmitter	1 $\frac{3}{8}$ " (W) × $\frac{3}{5}$ " (H) × 2 $\frac{3}{4}$ " (D)
Norm Conformity	CE, FCC, IC



10RD433	433 MHz analog receiver
10RD433EH	433 MHz analog receiver with extended hold time
10TD433HH1	Handheld transmitter, 433 MHz, 1-button (3-volt battery)
10TD433HH2	Handheld transmitter, 433 MHz, 2-button (3-volt battery)
10TD433HH3	Handheld transmitter, 433 MHz, 3-button (3-volt battery)
10TD433HH4	Handheld transmitter, 433 MHz, 4-button (3-volt battery)
10TD433PB3V	Wired, 433 MHz transmitter with flag connector (3-volt battery)
10TD433PB9V	Wired, 433 MHz transmitter with flag connectors (9-volt battery)
30.5124	Lithium coin battery, 3-volt
70.0261	Energizer battery, 9-volt





## **900 MHZ FAMILY**

LONG-RANGE, WIRELESS TRANSMITTERS AND RECEIVER

## **Signal Strength Indicator**

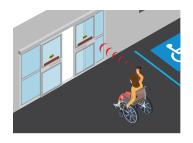
Multi-color LEDs on receiver provide installer with visual notification of signal strength and activation status

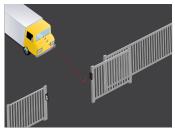
## **Consistent Transmission**

Frequency hopping allows consistent transmission in areas with other 900 MHz devices

## **Enhances Accessibility**

Offers a means of activation for those with limited mobility or disabilities





## **TECHNICAL SPECIFICATIONS**

Frequency	908 – 918 MHz (frequency hopping)	
Radio Control Type	Digital	
<b>Power Consumption</b>		
Standard	30mA (TX) / 40mA (RX)	
Industrial	13mA (TX) / 40mA (RX)	
Retrofit	22 mA	
Universal	30mA	
Supply Voltage	12 – 24 VAC/VDC	
Contact Rating	1.0 A at 30 VDC	
	0.3 A at 60 VDC	
	0.5 A at 125 VAC	
Operating Temperature	14 – 131 °F (-10 – 55 °C)	
Transmitter Capacity		
(per receiver)		
Programmable (std)	75	
Universal	Unlimited	
LED Activity	Receivers:	Transmitters:
	Red = receiver learn	Red = transmitting
	Blue = relay activation	Red Blinking = low battery
	Tri-color = signal strength	
Dimensions	Standard Handheld: 2 3/4" (W	) x 1 <sup>19</sup> / <sub>50</sub> " (D) x <sup>14</sup> / <sub>25</sub> " (H)
Transmitter	Standard Push-Plate Transmit	ter: 1 ¾" (W) x 1" (D) x ¾10" (H)
	Industrial Handheld: 1 ½" (W	') x 3" (D) x ½" (H)
	Retrofit: 1 18/25" (W) x 1 3/50" (	D) x <sup>8</sup> / <sub>25</sub> " (H)
Receiver	RD900: 2 ½" (W) x 2" (D) x ¾" (H)	
Norm Conformity	All: FCC, IC	
•	Industrial Handheld: IP65	



## **Variety of Accessories**

1, 2, 3, and 4 button handheld transmitters provide flexibility where multiple receivers are used

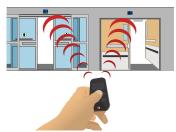
## **Extended Hold Functionality**

Extended hold and toggle/pulse functionality is integrated for various application needs

## **Learn Modes**

Delay and no-delay learn modes provide either instant or delayed activation for the sequencing of doors





10RD900	900 MHz receiver module
10TD900HH1	Handheld transmitter, 900 MHz, 1-button (3-volt battery)
10TD900HH2	Handheld transmitter, 900 MHz, 2-button (3-volt battery)
10TD900HH3	Handheld transmitter, 900 MHz, 3-button (3-volt battery)
10TD900HH4	Handheld transmitter, 900 MHz, 4-button (3-volt battery)
10TD900HH1U	Universal, 900 MHz transmitter
10TD900INDHH1	Handheld transmitter, 900 MHz, 1-button (NEMA 4 rated)
10TD900INDHH2	Handheld transmitter, 900 MHz, 2-button (NEMA 4 rated)
10TD900INDHH3	Handheld transmitter, 900 MHz, 3-button (NEMA 4 rated)
10TD900INDHH4	Handheld transmitter, 900 MHz, 4-button (NEMA 4 rated)
10Т900РВ	Wired, 900 MHz transmitter with flag connector (2 AAA batteries)
109TD900TR	900 MHz, touchless-retrofit transmitter
10BELTCLIP	Belt clip compatible with the industrial, handheld transmitters
30.5124	Lithium coin battery, 3-volt

## **PLATES & ACCESSORIES**

## **PUSH PLATE FAMILY**

## **4.5" ROUND**



















## **SOUARE**

























36" HIGH-LOW



**4.75" SQUARE** 



























10BOX475SQFM 10BOX475SQSM 10BOX475SQSMEBA 10BOXDG4H

## 4.75" VESTIBULE

















4.75" VESTIBULE FAMILY IS COMPATIBLE WITH BOLLARDS

## LPR36 FAMILY IS COMPATIBLE WITH BOLLARDS AVAILABLE IN HARDWIRED AND WIRELESS (900, 433 OR 300 MHZ) MODELS.

## **ROUND**









10PBR10











**SQUARE** 













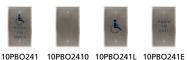










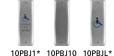




**JAMB (1.5" x 4.75")** 



























10BOLLARDBRZ 10BOLLARDBRZ 10BOLLARDBRZ

ALSO AVAILABLE WITHOUT HOLE

## 4 ½" ROUND AND SQUARE **PUSH PLATES**

STAINLESS STEEL ACTUATORS



1/16 inch thick stainless steel for maximum durability

### **Vandal Resistant**

Concealed fasteners to minimize vandalism

### **Available in Complete Kits**

Complete kits available including plates, mounting boxes, and optional wireless devices for ease of ordering





## **TECHNICAL SPECIFICATIONS**

Faceplate Material	Stainless steel (16 gauge, 304 2B)
Backplate Material	Aluminum (1/8" thick)
Mounting Screws	Stainless steel, 6-32 $\times$ 1" and 8-32 $\times$ 1" Allen head size: $\frac{5}{64}$
Cherry Switch	Single-pole, 1 A, COM/NO/NC, UL Recognized
Compatible Wireless Frequencies	900, 433, or 300 MHz
Dimensions	
Round	$4^{1/2}" (W) \times {}^{31/50}" (D)$
Square	$4 \frac{1}{2}$ " (W) × $4 \frac{1}{2}$ " (H) × $\frac{31}{50}$ " (D)

## **MOUNTING OPTIONS**

10BOX45SQFM	Flush-mount box (4 ½" square)
10BOX45SQSM	Surface-mount box (4 ½" square)
10BOX45RNDFM	Flush-mount box (4 ½" round)
10BOX45RNDSM	Surface-mount box (4 ½" round)
10ESCUTCHEON45	Stainless steel mounting option, used in place of mounting box
10WRRND45	Weather ring (4 ½" round)



## **Enhances Accessibility**

ADA-compliant push plates are available in a variety of popular faceplate graphic options

## **Highly Compatible and Customizable**

Compatible with both surface- and flush-mount boxes; various text, graphic, and logo options available



10PBR45	4 ½" round, stainless steel plate with blue "Push to Open" text
10PBR451	4 ½" round, stainless steel plate with blue accessibility logo and "Push to Open" text
10PBR4510	4 ½" round, stainless steel, plain plate
10PBR45LL	4 ½" round, stainless steel plate with blue accessibility logo
10PBS45	4 ½" square, stainless steel plate with blue "Push to Open" text
10PBS451	4 ½" square, stainless steel plate with blue accessibility logo and "Push to Open" text
10PBS4510	4 ½" square, stainless steel, plain plate
10PBS45LL	4 ½" square, stainless steel plate with blue accessibility logo
10PBS45POD	4 ½" square, stainless steel plate with black "Press to Operate Door" text
10PBS45B	4 ½" square, stainless steel plate with white "Push to Open" text
10PBS451B	$4\ \ensuremath{\mbox{$\!\!\!/$\!\!\!/}}\xspace$ square, stainless steel plate with white accessibility logo and "Push to Open" text
10PBS451AL	$4\ \%$ " square, stainless steel plate with alternative, blue accessibility logo

## **4 ¾" SQUARE PUSH PLATES**

STAINLESS STEEL ACTUATORS



### **Robust Design**

1/16 inch thick stainless steel for maximum durability

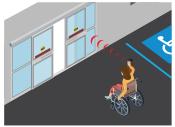
### **Vandal Resistant**

Concealed fasteners to minimize vandalism

## **Available in Complete Kits**

Complete kits available including plates, mounting boxes, and optional wireless devices for ease of ordering





## ADA-compliant push plates are available in a variety of popular faceplate graphic options

**Enhances Accessibility** 

## **Highly Compatible and Customizable**

Compatible with both surface- and flush-mount boxes; various text, graphic, and logo options available



## **TECHNICAL SPECIFICATIONS**

Faceplate Material	Stainless steel (16 gauge, 304 2B)
Backplate Material	Aluminum (1/8" thick)
Mounting Screws	Stainless steel, 6-32 $\times$ 1" and 8-32 $\times$ 1" Allen head size: $\frac{5}{64}$
Cherry Switch	Single-pole, 1 A, COM/NO/NC, UL Recognized
Compatible Wireless Frequencies	900, 433, or 300 MHz

## **MOUNTING OPTIONS**

10BOX475SQSMEBA	Surface-mount box (4 ¾" square) with easy battery access
10BOX475SQFM	Flush-mount box (4 3/4" square)
10BOX475SQSM	Surface-mount box (4 ¾" square)
10WRSQ475	Weather ring (4 ¾" square)

10PBS	4 3/4" square, stainless steel plate with blue "Push to Open" text
10PBS1	$4{}^3\!\!/\!\!4$ " square, stainless steel plate with blue accessibility logo and "Push to Open" text
10PBS10	4 <sup>3</sup> / <sub>4</sub> " square, stainless steel, plain plate
10PBSLL	4 ¾ " square, stainless steel plate with blue accessibility logo
10PBSE	4 ¾" square, stainless steel plate with blue "Push to Exit" text
10PBS1B	4% " square, stainless steel, blue plate with white accessibility logo and "Push to Open" text
10PBS1SB	$4^3\!\!/\!_{*}$ " square, stainless steel plate (BHMA finish 606, satin brass) with blue accessibility logo and "Push to Open" text
10PBS1AL	4 ¾ " square, stainless steel plate with alternative, blue accessibility logo
20.0044	Screw kit for all 4 ¾" square plates include: (2) #6 and (2) # 8 screws (2) flag connectors (1) hex key
50.5016	Adapter ring

## **6" ROUND AND SQUARE PUSH PLATES**

STAINLESS STEEL ACTUATORS

## **Robust Design**

1/16 inch thick stainless steel for maximum durability

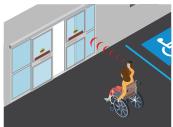
### **Vandal Resistant**

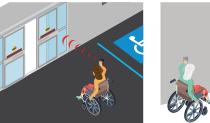
Concealed fasteners to minimize vandalism

### **Available in Complete Kits**

Complete kits available including plates, mounting boxes, and optional wireless devices for ease of ordering







## **TECHNICAL SPECIFICATIONS**

Faceplate Material	Stainless steel (16 gauge, 304 2B)
Backplate Material	Aluminum (1/8" thick)
Mounting Screws	Stainless steel, 6-32 $\times$ 1" and 8-32 $\times$ 1" Allen head size: $\frac{5}{64}$
Cherry Switch	Single-pole, 1 A, COM/NO/NC, UL Recognized
Compatible Wireless Frequencies	900, 433, or 300 MHz

## **MOUNTING OPTIONS**

10BOX6SQFM	Flush-mount box (6" square)
10BOX6SQSM	Surface-mount box (6" square)
10BOX6RNDFM	Flush-mount box (6" round)
10BOX6RNDSM	Surface-mount box (6" round)
10WRRND6	Weather ring (6" round)



## **Enhances Accessibility**

ADA-compliant push plates are available in a variety of popular faceplate graphic options

## **Highly Compatible and Customizable**

Compatible with both surface- and flush-mount boxes; various text, graphic, and logo options available



10PBR	6" round, stainless steel plate with blue "Push to Open" text
10PBR1	6" round, stainless steel plate with blue accessibility logo and "Push to Open" text
10PBR10	6" round, stainless steel, plain plate
10PBRLL	6" round, stainless steel plate with blue accessibility logo
10PBR1AL	6" round, stainless steel plate with alternative, blue accessibility logo
10PBS6	6" square, stainless steel plate with blue "Push to Open" text
10PBS61	6" square, stainless steel plate with blue accessibility logo and "Push to Open" text
10PBS610	6" square, stainless steel, plain plate
10PBS6LL	6" square, stainless steel plate with blue accessibility logo
20.0044	Screw kit for all 4 ¾" square plates include: (2) #6 and (2) # 8 screws (2) flag connectors (1) hex key

## **JAMB PUSH PLATES**

STAINLESS STEEL ACTUATORS

## **Robust Design**

1/16 inch thick stainless steel for maximum durability

## **Vandal Resistant**

Concealed fasteners to minimize vandalism

## **Available in Complete Kits**

Complete kits available including plates, mounting boxes, and optional wireless devices for ease of ordering





## **TECHNICAL SPECIFICATIONS**

Faceplate Material	Stainless steel (16 gauge, 304 2B)
Backplate Material	Aluminum (1/8" thick)
Mounting Screws	Stainless steel, 6-32 $\times$ 1" and 8-32 $\times$ 1" Allen Head Size: $\frac{1}{4}$
Cherry Switch	Single-pole, 1 A, COM/NO/NC, UL Recognized
Compatible Wireless	
Frequencies	900, 433, or 300 MHz
Dimensions	1 $\frac{1}{2}$ " (W) × 4 $\frac{3}{4}$ " (H) × $\frac{3}{50}$ " (D)

## **MOUNTING OPTIONS**

10BOXJAMBFM	Flush-mount, jamb box (1 $\frac{1}{2}$ " × 4 $\frac{3}{4}$ " jamb)
10BOXJAMBSM	Surface-mount, jamb box (1 $\frac{1}{2}$ " × 4 $\frac{3}{4}$ " jamb)
10BOXJAMBST	Surface-mount, jamb box - hardwired only (1 <sup>3</sup> / <sub>4</sub> " × 4 <sup>1</sup> / <sub>2</sub> " jamb) <i>Compatible only with 10PBJMS series and MAGIC SWITCH jamb plates</i>

Be sure to match push plate dimensions with box dimensions - not all push plates are compatible with all mounting boxes.



## **Enhances Accessibility**

ADA-compliant push plates are available in a variety of popular faceplate graphic options

## **Highly Compatible and Customizable**

Compatible with both surface- and flush-mount boxes; various text, graphic and logo options available



10PBJ	1 ½" $\times$ 4 ¾" jamb, stainless steel push plate with blue "Push to Open" text
10PBJ1	1 ½" × 4 ¾" jamb, stainless steel push plate with blue accessibility logo and "Push to Open" text
10PBJ10	1 ½" × 4 ¾" jamb, stainless steel, plain push plate
10PBJL	1 ½" × 4 $^3\!\!$ ¼" jamb, stainless steel push plate with blue accessibility logo
10PBJE	1 ½" $\times$ 4 ¾" jamb, stainless steel push plate with blue "Push to Exit" text
10PBJ1B	1 ½" × 4 ¾" jamb, stainless steel, blue push plate with white accessibility logo and "Push to Open" text
10PBJM1	1 ½" × 4 ¾" jamb, stainless steel push plate with blue accessibility logo and "Push to Open" text Includes microswitch with 2-stud touch points
10PBJML	1 ½" × 4 ¾" jamb, stainless steel push plate with blue accessibility logo Includes microswitch with 2-stud touch points
10PBJMSLL	1 ¾" × 4 ½" jamb, stainless steel push plate with blue accessibility logo Includes microswitch with 2-stud touch points
10PBJMS1	1 ¾" × 4 ½" jamb, stainless steel push plate with blue accessibility logo and "Push to Open" text Includes microswitch with 2-stud touch points
10PBJSREV	1 $\frac{3}{4}$ " × 4 $\frac{1}{2}$ " jamb, stainless steel push plate with "Push to Slow" text with braille

## LPR36 PUSH PLATE

FULL LENGTH, 36 INCH, HIGH-LOW ACTUATOR

## **Enhances Accessibility**

Offers a mean of activation of automatic doors for those with limited mobility or disabilities

## **Low Profile, Aesthetically Pleasing Design**

Low-profile (1 inch deep) design helps prevent accidental damage in high traffic areas

## **Standard Compliant, High-Accessibility Plate**

Exceeds California Building Code 2013, Page 559, 11B-404.2.9, Exception 2c

## **Versatile Mounting**

Easily installs on either walls or bollards for maximum mounting flexibility







## **TECHNICAL SPECIFICATIONS**

<b>Contact Configurations</b>	SPST N.O.
Switching Voltage	< 50 VDC
Switching Capacity	1 Watt
Switching Current	< 100 mA DC
Materials	
Base	6063 Aluminum
Face Plate	304 Stainless steel
Switch Actuator	Nylon 66
End Cap	UL94 ABS
Hardware	Stainless steel
Operation Temperature	-32 – 212 °F (-35 – 100 °C)
Compliance	California Building Code 2022, 11B-404.2.9,
	Exception C ANSI 156.10, 156.19, 156.27, 156.38



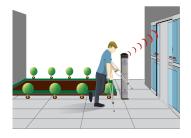
## **Easily Converts to Wireless**

Available with convenient, built-in, wireless transmitter (300, 433, or 900 MHz frequencies) for wireless activation applications

## **Full-Length Activation**

Activation area of 36 by 6 inches (216 square inches)

Not recommended for use in an environment where it will be directly exposed to water (e.g. outdoor, not protected from direct rain).





10LPR36-300	36" vertical, actuation bar with text and logo + 300 MHz Wireless
10LPR36L-300	36" vertical, actuation bar with logo only + 300 MHz Wireless
10LPR36-433	36" vertical, actuation bar with text and logo + 433 MHz Wireless
10LPR36L-433	36" vertical, actuation bar with logo only + 433 MHz Wireless
10LPR36-900	36" vertical, actuation bar with text and logo + 900 MHz Wireless
10LPR36L-900	36" vertical, actuation bar with logo only + 900 MHz Wireless
10LPR36-HW	36" vertical, actuation bar with text and logo (hardwired only)
10LPR36L-HW	36" vertical, actuation bar with logo only (hardwired only)
10LPRCAPKIT	Top and bottom replacement caps for the LPR36
10R300	300 MHz analog receiver
10RD433	433 MHz analog receiver
10RD433EH	433 MHz analog receiver, extended hold time
10RD900	900 MHz receiver module
10WCK433*	Wireless conversion kit, converts hardwired to 433 Wireless
10WCK900*	Wireless conversion kit, converts hardwired to 900 Wireless

<sup>\*</sup> Wireless conversion kit for transmitter replacement or conversion from hardwired to wireless





## **PANTHER PUSH PLATES**

PUSH PLATES WITH INTEGRATED WIRELESS TECHNOLOGY

## **Wireless Compatibility**

Reduces installation time by eliminating the need to run wires from the push plate or use additional mounting hardware

## **Enhanced Accessibility**

Offers a means of activation of automatic doors for these with limited mobility or disabilities





## PUSH TO OPEN PUSH TO OPEN

## **Vandal Resistant**

Concealed fasteners minimize vandalism

## **Weather Rated**

IP65-rated housing creates a weather-resistant barrier that enables the push plates to be mounted in outdoor environments or wash-down applications

### **TECHNICAL SPECIFICATIONS**

<b>Dimensions</b> 6" Round	6 ⅓" (Ø) × 1 ½0" (D)
4.75" Round	$5^{3/25}$ " (Ø) × $1^{21/50}$ " (D)
4.75" Square	$5 \frac{3}{25}$ " (W) × $5 \frac{3}{25}$ " (H) × $1 \frac{21}{50}$ " (D)
Weight	
6" Round	1.2 lbs
4.75" Round	1.14 lbs
4.75" Square	1.04 lbs
<b>Mounting Options</b>	Surface or bollard
Transmitter Frequency*	433 MHz or 900 MHz**
Power	
433 MHz	(1) 12 V type A23
900 MHz	(2) CR2032
Materials	
Faceplate	Stainless steel (16 gauge, 304 2B)
Housing	ABS
Degree of Protection	IP65
	FCC IC Part 15 Approved

 $<sup>\ ^{\</sup>star}\ \ \text{Corresponding frequency receiver required}.$ 

10EMR475	4 ¾" round, "Push to Open" text only; with integrated 433 MHz transmitter
10EMR475-900	$4\ \ensuremath{\ensuremath{\%}}\xspace \ensuremath{\ensuremath{\%}}\xspace$ round, "Push to Open" text only; with integrated 900 MHz transmitter
10EMR475L	$4\ \ensuremath{\%}\mbox{\ensuremath{\#}}$ round, accessibility logo only; with integrated 433 MHz transmitter
10EMR475L-900	$4\ \ensuremath{^3\!\!/\!\!4}$ " round, accessibility logo only; with integrated 900 MHz transmitter
10EMR4751	$4\ \mbox{\ensuremath{\%}}\mbox{\ensuremath{\#}}\mbox{\ensuremath{"}}$ round, "Push to Open" text and accessibility logo; with integrated 433 MHz transmitter
10EMR4751-900	$4\ \mbox{\em \%}''$ round, "Push to Open" text and accessibility logo; with integrated 900 MHz transmitter
10EMR6	6" round, "Push to Open" text only; with integrated 433 MHz transmitter
10EMR6-900	6" round, "Push to Open" text only; with integrated 900 MHz transmitter
10EMR6L	6" round, accessibility logo only; with integrated 433 MHz transmitter
10EMR6L-900	6" round, accessibility logo only; with integrated 900 MHz transmitter
10EMR61	6" round, "Push to Open" text and accessibility logo; with integrated 433 MHz transmitter
10EMR61-900	6" round, "Push to Open" text and accessibility logo; with integrated 900 MHz transmitter
10EMS475	$4^3\!\!\!/4$ " square, "Push to Open" text only; with integrated 433 MHz transmitter
10EMS475-900	$4{}^3\!\!\!/{}^{\rm w}$ square, "Push to Open" text only; with integrated 900 MHz transmitter
10EMS475L	4% " square, accessibility logo only; with integrated 433 MHz transmitter
10EMS475L-900	4% " square, accessibility logo only; with integrated 900 MHz transmitter
10EMS4751	4 ¾ " square, "Push to Open" text and accessibility logo; with integrated 433 MHz transmitter
10EMS4751-900	4 ¾ " square, "Push to Open" text and accessibility logo; with integrated 900 MHz transmitter
15.5039	Spare PCB for PANTHER plate - 433 series
15.5142	Spare PCB for PANTHER plate - 900 series

<sup>\*\*</sup> See 433 MHz and 900 MHz User's Guides for more information on BEA's wireless transmitters and receivers.

## **SINGLE GANG PUSH PLATES**

STAINLESS STEEL ACTUATORS

## **Robust Design**

1/16 inch thick stainless steel for maximum durability

## **Vandal Resistant**

Concealed fasteners to minimize vandalism

## **Available in Complete Kits**

Complete kits available including plates, mounting boxes, and optional wireless devices for ease of ordering





## **TECHNICAL SPECIFICATIONS**

/1/ // + -:- -\
n (1/8" thick)
steel, 6-32 × 1" and 8-32 × 1" Id size: 5/64
le, 15 A, COM/NO/NC, UL Recognized
, or 300 MHz







## **Enhances Accessibility**

ADA-compliant push plates are available in a variety of popular faceplate graphic options

## **Highly Compatible and Customizable**

Compatible with both surface- and flush-mount boxes; various text, graphic, and logo options available



## **PRODUCT SERIES**

10PBO241	Single-gang, stainless steel push plate with blue accessibility logo and "Push to Open" text
10PBO2410	Single-gang, stainless steel, plain push plate
10PBO24L	Single-gang, stainless steel push plate with blue accessibility logo
10PBO24E	Single-gang, stainless steel push plate with blue "Push to Open" text

## **MOUNTING OPTIONS**

10BOX24SGSM	Standard single-gang,	surface-mount box (2	$\frac{3}{4}$ " × 4 $\frac{1}{2}$ ")

## **VESTIBULE PLATES**

STAINLESS STEEL ACTUATORS

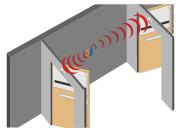
## **Robust Design**

1/16 inch thick stainless steel for maximum durability

## **Available in Complete Kits**

Complete kits available including plates, mounting boxes, and optional wireless devices for ease of ordering





## **Vandal Resistant**

Concealed fasteners to minimize vandalism

## **Enhances Accessibility**

ADA-compliant push plates are available in a variety of popular faceplate graphic options

## **TECHNICAL SPECIFICATIONS**

Faceplate Material	Stainless steel (16 gauge, 304 2B)
Backplate Material	Aluminum (1/8" thick)
Mounting Screws	Stainless steel, 6-32 $\times$ 1" and 8-32 $\times$ 1" Allen head size: $\frac{5}{64}$
Cherry Switch	Single-pole, 15 A, COM/NO/NC, UL Recognized
Compatible Wireless Frequencies	900, 433, or 300 MHz
Dimensions	$4^{3}/_{4}$ " (W) × $4^{3}/_{4}$ " (H) × $^{31}/_{50}$ " (D)

## **PRODUCT SERIES**

10PBDGP1	Stainless steel dual Push Plate for vestibule includes:
	One (1) adapter ring, two (2) separate Push Plates with "Push to Open" text and accessibility logo
	Requires two (2) 10TD433PB3V or two (2) 10TD900PB transmitters

## **MOUNTING OPTIONS**

10BOX475SQSMEBA	Surface-mount box (4 <sup>3</sup> / <sub>4</sub> " square) with easy battery access <i>Adapter ring 50.5016 required</i>
10BOX475SQSM	Surface-mount box (4 <sup>3</sup> / <sub>4</sub> " square) <i>Adapter ring 50.5016 required</i>
10BOX475SQFM	Flush-mount box (4 ¾" square)  Adapter ring 50.5016 required
10BOXDGSM	Surface-mount box, double gang  Adapter ring 50.5016 required
10BOLLARD SERIES	Bollard (see page 105)
50.5016	Adapter ring

## HANDS-FREE DOOR ACTIVATION



## **GO TOUCHLESS AT WAVETOOPEN.COM**

A healthcare practitioner has her hands full. A person with limited mobility might run into challenges with accessibility. And others rather not touch public surfaces. As we run from point A to point B, we often don't think about opening doors. That is until we have to. Let's worry less and make door activation easier by the wave of a hand.

BEA's MAGIC SWITCH® Family provides a highly accessible and germ-free door activation without physical contact. Reduce touchpoints in fast-paced environments that depend on sanitation and hands-free access like healthcare, retail, industrial and commercial settings.

## **READ MORE ON PAGES 70 - 75**



**ACTIVATION** 

WAVE TO OPEN







ADJUSTABLE DETECTION ZONE



ENVIRONMENTAL IMMUNITY



OPEN

BATTERY-POWERED MODELS AVAILABLE





## **MS09**

IP65 RATED, MICROWAVE, TOUCHLESS ACTUATOR

## **Weather-Resistant Housing**

IP65 enclosure capable of use in industrial and extreme environments, as well as wash-down facilities

## **Adjustable Detection Zone**

User-defined detection zone from 4 to 24 inches (pulse or toggle)





## Appropriate for All Environments

Can be used in a variety of indoor and outdoor applications

## **No Mounting Accessories Needed**

External mounting boxes are not required

## **TECHNICAL SPECIFICATIONS**

Technology	Microwave motion sensor
Detection Mode	Motion (bidirectional)
Detection Range*	4 – 24" (adjustable)
Product Temperature Range	-4 – 131 °F (-20 – 55 °C)
Output Hold Time	0.5 s (in pulse mode)
Supply Voltage**	12 – 24 VAC ±10%
	12 – 24 VDC +30% / -10%
Supply Frequency	50 – 60 Hz
Radiated Frequency	24.125 GHz
Radiated Power Density	< 5 mW / cm <sup>2</sup>
Power Consumption	< 1.5 W
Output  Relay Contact Rating (Max. Voltage)  Relay Contact Rating (Max. Current)  Max. Switching Power	
Cable Type	Compatible with standard, 4-conductor low voltage cable (cable not supplied)
Dimensions	3.15" (W) × 3.23" (H) × 2.165" (D)
Material / Color	Enclosure: PC / White Cable Gland: ASA
Weight	0.5 lbs
IP Rating	IP65
Certification	Electromagnetic compatibility (EMC) according to 2004/108/EC FCC: G9B-210161 IC: 4680A-210161

<sup>\*</sup> Detection range is dependent upon object size, object orientation, object speed, and environmental conditions

10MS09TL	Mmicrowave cell with single-gang, white faceplate (text and logo)
10MS09L	Microwave cell with single-gang, white faceplate (logo only)
10RD900	900 MHz receiver module
10TD900TR	900 MHz retrofit transmitter

<sup>\*\*</sup> To be operated from SELV-compatible power supplies only





## **MS31**

MICROWAVE, TOUCHLESS ACTUATOR WITH ADJUSTABLE RANGE AND RELAY HOLD TIME

## **Adjustable Detection Zone**

Detection zone from 4 to 24 inches (timed or toggle)

## **Adjustable LED Setting**

DIP switch position determines if LED illuminates when in detection or when not in detection

## **Silent Activation**

Silent activation for hospitals and other noise-sensitive environments





# WAVE TO OPEN WAVE TO OPEN WAVE TO OPEN WAVE TO OPEN WAVE TO OPEN

## **Durable Design**

IP54-rated enclosure for protection against outdoor weather and daily cleaning

## **Various Faceplates Available**

Available in black, gray, and white faceplate; options include jamb style, single gang, double gang, and 6 inch round





## **TECHNICAL SPECIFICATIONS**

Technology	Microwave Doppler radar
Radiated Frequency	24.125 GHz
Radiated Power Density	< 5 mW / cm <sup>2</sup>
<b>Detection Mode</b>	Motion (bidirectional)
<b>Detection Range</b>	4 – 24" (adjustable)
Output	Relay with switch-over contact (voltage-free)
Max. Contact Voltage	60 VDC / 125 VAC
Max. Contact Current	1 A (resistive)
Max. Switching Power	30 W (DC) / 60 VA (AC)
Output Hold Time	0.5 – 30 s
Supply Frequency	50 – 60 Hz
Supply Voltage	12 – 24 VAC ±10%, 12 – 24 VDC +30% / -10%
Power Consumption	< 1.5 W
Weight	0.34 lbs
Materials	PC, PE
Temperature Range	-4 − 131 °F (-20 − 55 °C)
IP Rating	IP54
Dimensions	
Single Gang	$4 \frac{1}{2}$ " (H) × 2 $\frac{3}{4}$ " (W) × $\frac{1}{4}$ " (T)
Jamb Plate	$4 \frac{1}{2}$ " (H) × 1 $\frac{3}{4}$ " (W) × $\frac{1}{4}$ " (T)
Double Gang	$4 \frac{1}{2}$ " (H) × $4 \frac{1}{2}$ " (W) × $\frac{1}{4}$ " (T)
Round Plate	6" (D) × 1/4" (T)
Certification	EMC: 2004 / 108 / EC
	FCC: G9B-210161
	IC: 4680A-210161

## **PRODUCT SERIES**

10MS31U-B	Single gang and double gang faceplates kit (text and logo, black)
10MS31U-G	Single gang and double gang faceplates kit (text and logo, gray)
10MS31U-W	Single gang and double gang faceplates kit (text and logo, white)
10MS31J-B	Jamb faceplate kit (text and logo, black)
10MS31J-G	Jamb faceplate kit (text and logo, gray)
10MS31J-W	Jamb faceplate kit (text and logo, white)
10MS31R-B	6" round faceplate kit (text and logo, black)
10MS31R-G	6" round faceplate kit (text and logo, gray)
10MS31R-W	6" round faceplate kit (text and logo, white)
10RD900	900 MHz receiver module
10TD900TR	900 MHz retrofit transmitter
MS31CUSTOM	MS31 kit with microwave cell and choice of accessibility logo or plain in any size/shape options

See next page for optional faceplate styles...

#### **PRODUCT SERIES**

70.5869	Single gang faceplate (plain, black)
70.5833	Single gang faceplate (text and hand logo, black)
70.5834	Single gang faceplate (text and accessibility logo, black)
70.5872	Jamb faceplate (plain, black)
70.5825	Jamb faceplate (text and hand logo, black)
70.5826	Jamb faceplate (text and accessibility logo, black)
70.5870	Double gang faceplate (plain, black)
70.5841	Double gang faceplate (text and hand logo, black)
70.5842	Double gang faceplate (text and accessibility logo, black)
70.5871	6" round faceplate (plain, black)
70.5849	6" round faceplate (text and hand logo, black)
70.5850	6" round faceplate (text and accessibility logo, black)
70.5835	Single gang faceplate (plain, gray)
70.5836	Single gang faceplate (text and hand logo, gray)
70.5837	Single gang faceplate (text and accessibility logo, gray)
70.5827	Jamb faceplate (plain, gray)
70.5828	Jamb faceplate (text and hand logo, gray)
70.5829	Jamb faceplate (text and accessibility logo, gray)

70.5843	Double gang faceplate (plain, gray)
70.5844	Double gang faceplate (text and hand logo, gray)
70.5845	Double gang faceplate (text and accessibility logo, gray)
70.5851	6" round faceplate (plain, gray)
70.5852	6" round faceplate (text and hand logo, gray)
70.5853	6" round faceplate (text and accessibility logo, gray)
70.5838	Single gang faceplate (plain, white)
70.5839	Single gang faceplate (text and hand logo, white)
70.5840	Single gang faceplate (text and accessibility logo, white)
70.5830	Jamb faceplate (plain, white)
70.5831	Jamb faceplate (text and hand logo, white)
70.5832	Jamb faceplate (text and accessibility logo, white)
70.5846	Double gang faceplate (plain, white)
70.5847	Double gang faceplate (text and hand logo, white)
70.5848	Double gang faceplate (text and accessibility logo, white)
70.5854	6" round faceplate (plain, white)
70.5855	6" round faceplate (text and hand logo, white)
70.5856	6" round faceplate (text and accessibility logo, white)

See page 76 for mounting options...

#### MS31 CUSTOM KIT (MS31CUSTOM + 70.XXXX)

70.5871

70.5849

70.5850

70.5851



70.5856

70.5852

70.5853

70.5854

70.5855





### **MS41**

STAINLESS STEEL, TOUCHLESS ACTUATOR WITH ADJUSTABLE RANGE AND RELAY HOLD TIME

#### **Durable Faceplate**

Stainless steel faceplate increases durability and protection from daily cleaning

#### **Ideal For Harsh Environments**

IP55-rated enclosure capable of use in industrial and extreme wash-down environments

#### **High Visibility**

Animated- or static-illuminated ring allows for high-visibility in low light areas





#### **TECHNICAL SPECIFICATIONS**

<b>Technology</b> Radiated Frequency Radiated Power Density	Microwave Doppler radar 24.125 GHz < 5 mW/cm <sup>2</sup>		
<b>Detection Mode</b>	Motion (bidirectional)		
<b>Detection Range</b>	4 – 24" (adjustable)		
Output  Max. Contact Voltage  Max. Contact Current  Max. Switching Power	Relay with switch-over contact (voltage-free) 60 VDC / 125 VAC 1A (resistive) 30 W (DC) / 60 VA (AC)		
<b>Output Hold Time</b>	0.5 – 30 s		
Supply Frequency	50 – 60 Hz		
Supply Voltage	12 – 24 VAC ±10% 12 – 24 VDC +30% / -10%		
Power Consumption	< 1.5 W		
Wire Gauge	26 – 22 AWG		
Weight	0.34 lbs		
Material	Stainless steel		
Temperature Range	-4 – 131 °F		
IP Rating*	IP55 Apply silicone to achieve IP65		
Dimensions Single Gang Jamb Double Gang Round Cube	4 ½" (H) × 2 ¾" (W) × ½0" (T) 4 ½" (H) × 1 ¾" (W) × ¼" (T) 4 ½" (H) × 4 ½" (W) × ½" (T) 6" (D) × ½0" (T) 2 ½6" (H) × 1 ⅓6" (W) × 1 ½" (T)		
Certification	EMC: 2004 / 108 / EC FCC: G9B-210161 IC: 4680A-210161		

<sup>\*</sup> See Users Guide.

MS41 Single, Double, and Round adapter bracket 70.5236 is included in the box.

Adapter bracket can be used to replace a mud ring whose opening measures less than 2".



#### **Adjustable Detection Zone**

Adjustable sensing zone from 4 to 24 inches (timed or toggle)

#### **Activation Alerts**

Adjustable, audible alert setting, including silent-mode required for hospitals and other noise-sensitive environments

#### **Adjustable Hold Time**

Configurable output hold time of  $\frac{1}{2}$  to 30 seconds allowing unique, user-defined device placement



#### **PRODUCT SERIES**

10MS41-S	Single gang, stainless steel faceplate (text and hand logo)
10MS41-SA	Single gang, stainless steel faceplate (text and accessibility logo)
10MS41-SP	Single gang, stainless steel faceplate (plain)
10MS41-SPAL	Single gang, stainless steel faceplate (accessibility logo)
10MS41-SPHL	Single gang, stainless steel faceplate (hand logo)
10MS41-J	Jamb, stainless steel faceplate (text and hand logo)
10MS41-JA	Jamb, stainless steel faceplate (text and accessibility logo)
10MS41-JP	Jamb, stainless steel faceplate (plain)
10MS41-JPAL	Jamb, stainless steel faceplate (accessibility logo)
10MS41-JPHL	Jamb, stainless steel faceplate (hand logo)
10MS41-D	Double gang, stainless steel faceplate (text and hand logo)
10MS41-DA	Double gang, stainless steel faceplate (text and accessibility logo)
10MS41-DP	Double gang, stainless steel faceplate (plain)
10MS41-DPAL	Double gang, stainless steel faceplate (accessibility logo)
10MS41-DPHL	Double gang, stainless steel faceplate (hand logo)
10MS41-R	6" round, stainless steel faceplate (text and hand logo)
10MS41-RA	6" round, stainless steel faceplate (text and accessibility logo)
10MS41-RP	6" round, stainless steel faceplate (plain)
10MS41-RPAL	6" round, stainless steel faceplate (accessibility logo)
10MS41-RPHL	6" round, stainless steel faceplate (hand logo)
10TD900TR	900 MHz retrofit transmitter

See page 76 for mounting options...



### **MS51**

BATTERY-POWERED, TOUCHLESS ACTUATOR

#### **Best-in-Class Battery Life**

3-year battery life provides uninterrupted operation in the field

#### **Reduce False Detections**

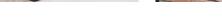
Built-in redundant sensor ensures consistent detection in the event of environmental interference such as window pollution

Selectable immunity modes mitigate environmental disturbances such as rain, water spray, and snow

Advanced light-cancellation feature reduces false detections from direct sun and light in exposed areas







10MS51-S	Actuator with single-gang plate
10MS51-D	Actuator with double-gang plate
10MS51-R	Actuator with round plate
10MS51-J	Actuator with jamb plate
10MS51-SA	Single gang, with text and accessibility logo
10MS51-SAF	Single gang, with French text and accessibility logo
10MS51-SP	Single gang, plain
10MS51-ST	Single gang, with text only
10MS51-DA	Double gang, with text and accessibility logo
10MS51-DP	Double gang, plain
10MS51-DT	Double gang, with text only
10MS51-RA	Round, with text and accessibiliity logo
10MS51-RP	Round, plain
10MS51-RT	Round, with text only
10MS51-JA	Jamb, with text and accessibility logo
10MS51-JP	Jamb, plain
10MS51-JT	Jamb, with text only
10RD900	900 MHz receiver module
10BR2-900	2-relay logic module
10TD900PB	900 MHz hardwired transmitter

See page 76 for mounting options...



#### **Easy Installation & Setup**

Quick push-plate retrofit reduces installation time and cost Three-step process simplifies installers' time in the field

#### **Robust Construction**

Stainless steel faceplate and IP65 rating for harsh environments



**PRODUCT SERIES** 



#### **TECHNICAL SPECIFICATIONS**

Technology	Active infrared			
number of IR sensors	2			
Detection Range	8" (20cm) max.			
Battery Life	3 years (at 150 activations per day)			
Product Temperature Range	-22 – 158 °F (-30 – 70 °C)			
Output max. switching voltage max. switching current	1 electronic relay (galvanic isolatioon - polarity free) 42 VAC/VDC 100 ma			
Power Supply	3 VDC (2 AA batteries, each ~1.5 V max.)			
Power Consumption	< 0.5 mW (when idle) < 12 mW (upon activation)			
Wire Gauge	26-16 AWG			
<b>Dimensions (overall)</b> Single Gang Double Gang Round	4 ½" (H) × 2 ¾" (W) × 1 ¼" (T) 4 ½" (H) × 4 ½" (W) × 1 ¼" (T) 6" (H/W) × 1 ¼" (T)			
Jamb	$4 \frac{1}{2}$ " (H) × $1 \frac{3}{4}$ " (W) × $1 \frac{1}{4}$ " (T)			
Materials	Stainless Steel 304 and PC			
Weight	Single gang: 0.34 lb Double gang: 0.55 lb Round: 0.71 lb Jamb: 0.29 lb			
IP Rating	IP65			



### **MS51W**

BATTERY-POWERED, TOUCHLESS ACTUATOR WITH BUILT-IN, 900 MHZ TRANSMITTER

#### **Best-in-Class Battery Life**

3-year battery life provides uninterrupted operation in the field\*

#### **Built-in, Wireless Transmitter**

Integrated 900 MHz transmitter reduces installation time\*\* 900 MHz wireless technology provides greater line-of-sight transmission distance for reliable activation

#### **Easy Installation & Setup**

Completely wireless solution reduces overall installation time and cost

Three-step process simplifies installers' time in the field





# WAVE TO OPEN WAVE TO OPEN OPEN OPEN

#### **Enhanced Performance Features**

Built-in redundant sensor ensures consistent detection in the event of environmental interference such as window pollution Selectable immunity modes mitigate environmental disturbances such as rain, water spray, and snow

Advanced light-cancellation feature reduces false detections from direct sun and light in exposed areas

#### **Robust Construction**

Stainless steel faceplate and IP65 rating for harsh environments

- \* certain combinations of settings can affect maximum battery life
- \*\* corresponding wireless receiver sold separately





#### **TECHNICAL SPECIFICATIONS**

Technology	Active infrared		
number of IR sensors	2		
Radio Control Type	Digital		
Frequency	908 – 918 MHz (frequency hopping)		
<b>Emitted Radio Power</b>	-25 dBm (transmitter)		
Detection Range			
Long Range (default)	12" (30.5cm) max.		
	(2 year maximum battery life, at 150 activations per day)		
Short Range	6" (15.24cm) max.		
	(3 year maximum battery life, at 150 activations per day)		
Product Temperature Range	-22 – 158 °F (-30 – 70 °C)		
Power Supply	3 VDC (2 AA batteries, each ~1.5 V max.)		
Power Consumption	< 0.5 mW (when idle)		
	< 12 mW (upon activation)		
Dimensions (overall)			
Single Gang	$4\frac{1}{2}$ " (H) × $2\frac{3}{4}$ " (W) × $1\frac{1}{4}$ " (T)		
Double Gang	4 ½" (H) × 4 ½" (W) × 1 ¼" (T)		
Round	6" (H/W) × 1 1/4" (T)		
Jamb	$4\frac{1}{2}$ " (H) × $1\frac{3}{4}$ " (W) × $1\frac{1}{4}$ " (T)		
Materials	Stainless Steel 304 and PC		
Weight	Single gang: 0.34 lb		
	Double gang: 0.55 lb		
	Round: 0.71 lb		
	Jamb: 0.29 lb		
IP Rating	IP65		
FCC Certification	FCC: 2ABWS-10TD900PB		
	IC: 4680A-10TD900PB		

#### **PRODUCT SERIES**

4004654141.6	A control of the control of the
10MS51W-S	Actuator with single-gang plate
10MS51W-D	Actuator with double-gang plate
10MS51W-R	Actuator with round plate
10MS51W-J	Actuator with jamb plate
10MS51W-SA	Single gang, with text and accessibility logo
10MS51W-SAF	Single gang, with French text and accessibility logo
10MS51W-SP	Single gang, plain
10MS51W-ST	Single gang, with text only
10MS51W-DA	Double gang, with text and accessibility logo
10MS51W-DP	Double gang, plain
10MS51W-DT	Double gang, with text only
10MS51W-RA	Round, with text and accessibiliity logo
10MS51W-RP	Round, plain
10MS51W-RT	Round, with text only
10MS51W-JA	Jamb, with text and accessibility logo
10MS51W-JP	Jamb, plain
10MS51W-JT	Jamb, with text only
10RD900	900 MHz receiver module
10BR2-900	2-relay logic module

#### **ADDITIONAL OPTIONS**

10MS51W-SKIT	Kit includes: (2) 10MS51W-S sensors (2) 10MSBOXSGSM boxes (1) 10RD900 receiver
10MS51W-DKIT	Kit includes: (2) 10MS51W-D sensors (2) 10MSBOXDGSM boxes (1) 10RD900 receiver

See page 76 for mounting options...

## **MAGIC SWITCH MOUNTING BOXES**

SURFACE-MOUNT BOXES FOR MAGIC SWITCH PRODUCTS

#### **MAGIC SWITCH Family Compatibility\***

Surface-mount boxes compatible with all faceplate styles for MS31, MS41, MS51, and MS51W

#### Ideal for Harsh Environments\*\*

IP65-rated, capable for indoor and outdoor usage providing a water-resistant, dust tight enclosure



#### **Various Sizes Available**

Available in single-gang, double-gang, round, and jamb sizes

#### **Practical Design**

Surface-mount boxes work in places where it may not be practical to add a wall box









#### **TECHNICAL SPECIFICATIONS**

#### Dimensions

10MSBOXSGSM	Single-gang, surface-mount box for MAGIC SWITCH products
10MSBOXDGSM	Double-gang, surface-mount box for MAGIC SWITCH products
10MSBOXRNDSM	Round, surface-mount box for MAGIC SWITCH products
10MSBOXJAMBSM	Jamb, surface-mount box for MAGIC SWITCH products

<sup>\*</sup> See Users Guide

<sup>\*\*</sup> To achieve an IP65 rating, you must apply silicone to any drilled holes.





## **MS51W ONE-BOX SOLUTIONS**

Offering convenient kits for easy ordering, stocking and door automation. Kits include single gang or double gang faceplates, corresponding MAGIC SWITCH Surface-Mount Boxes and a 900 MHZ Wireless Receiver.

### WHAT'S INCLUDED





### MS51W S-KIT

- 2 Single-gang MS51W faceplates
- 2 MAGIC SWITCH SURFACE-MOUNT BOXES
- 900 MHz Receiver Module



## **MS51W D-KIT**

- 2 Double-gang MS51W faceplates
- 2 MAGIC SWITCH SURFACE-MOUNT BOXES
- 900 MHz Receiver Module



#### **LEARN MORE**



BEA-MS51.com

## ACCESS CONTROL PUSH BUTTON

ILLUMINATED, REQUEST-TO-EXIT BUTTON



Easily replaced 12 to 24 VAC/VDC light bulb, reducing whole-product replacement

#### **Durable Faceplate**

Stainless steel faceplate





#### Secure

Vandal- and tamper-resistant design

#### Reliable

Tested to perform more than one million operations

#### **TECHNICAL SPECIFICATIONS**

Switch	
Voltage Max.	125 / 250 VAC
Current Max.	10 A
Power Max.	373 W
<b>Electrical Configuration</b>	SPDT
Bulb	
Input Voltage	28 VDC (14 VDC, optional)
Current	16 mA ±10%, 12 V

10ACPBSS1	Single-gang push	hutton	illuminated	"Push To Evit"
IUACEDSSI	Siffyle-garig pusi	i button,	mummateu,	FUSIT TO EXIL



## **CABINET LOCK**

80 LB ELECTROMAGNETIC LOCK

#### **TECHNICAL SPECIFICATIONS**

Door Configuration	Single / Cabinet, surface mount
Holding Force	80 lbs
Input Voltage	12 or 24 VDC
Current Draw	100 mA at 12 VDC 50 mA at 24 VDC
Dimensions	2 ¾" (W) × 1 <sup>11</sup> / <sub>50</sub> " (H) × <sup>7</sup> / <sub>10</sub> " (D)
Magnet Weight	0.44 lbs
Materials	
Lock Housing	Aluminum
Armature Plate	Zinc-plated steel

10MAGLIFELOCK9	Cabinet lock - single, 80 lb, 12 / 24 VDC



## **DELAYED-EGRESS MAGLOCK KIT**

UL LISTED, ALL-IN-ONE KIT WITH MAGLOCK, SOUNDER, AND KEYSWITCH



#### **Door-Synchronizing Feature**

Double doors (2 single doors) can be synchronized

#### **Programmable Egress Time**

Authorized egress time programmable zero to 15 seconds

#### **Selectable Alarm**

Selectable, 30-second, door prop alarm

#### **Customizable LED Features**

LED color and flashes can be customized

#### **TECHNICAL SPECIFICATIONS**

ired,
INDERKD
nada,
16

#### **Input Features**

Monitored, fire-alarm input

#### **Triggering Options**

Delayed-Egress MAGLOCK can be triggered with pressure on the door or with a REX input (or disabled completely)

#### **Standards Compliant**

UL294 listed kit

10MAGDE1	All-in-one Delayed Egress MAGLOCK Kit for single, out-swinging doors UL / ULC listed, LED status, 12 / 24 VDC
	Kit includes: (1) 1200 lb MAGLOCK (1) resettable KEYSWITCH (mortise cylinder not included) (1) external sounder (1) alarm signage
	UL Listed MAGLOCKS require a UL Listed power supply
10CYLINDERKA	1 ½" mortise cylinder, Schlage C Keyway, keyed alike
10CYLINDERKD	
TOCTEMBERIND	1 ½" mortise cylinder, Schlage C Keyway, keyed differently
10PS12-24	
	Schlage C Keyway, keyed differently
10PS12-24	Schlage C Keyway, keyed differently  UL / ULC Listed power supply  UL / ULC Listed power supply with backup circuit (1.75 A)



## **ELECTRIC STRIKES**

UL LISTED ELECTRIC STRIKES FOR US AND CANADA

#### **Modular Faceplate Options**

Three modular faceplates for the most common door types: hollow metal, aluminum, and wood

#### **Standards Compliant**

UL294 and UL1034 listed Universal Cylindrical and Rim Exit strikes

#### Configurable

The non-handed, fully reversible design is field selectable to 12 or 24 VDC and field reversible with a fail-safe or fail-secure mode



#### **Durable**

UL tested to 250,000 cycles, factory-tested to 1,000,000 cycles

#### **UL Listed**

Universal Cylindrical strikes are rated to 1000 lbs static and 70 lbs dynamic (50 lbs dynamic for CUV model)

Rim Exit strikes are rated to 1500 lbs static and 70 dynamic

#### **TECHNICAL SPECIFICATIONS**

10STRIKERE			
Mode*	Fail-safe		
Voltage	12 VAC/VDC	24 VAC/VDC	11 – 16 VAC
Duty**	Intermittent, Continuous	Intermittent, Continuous	Intermittent, Intermittent
Amps***	0.30, 0.50	0.64, 0.24	0.32 - 0.50
Sound	Buzz, silent	Buzz, silent	Buzz, buzz
Static / Dynamic Strength	1500 lbs / 70 lbs		
Endurance	250,000 cycles (L	JL tested)	
Latch Throw	3/4"		
Standards Compliance	UL294, UL1034,	UL and ULC listed	
10STRIKECU			
Mode*	Fail-safe, Fail-secu	ure	
Voltage	12 VDC	24 VDC	12 – 24 VAC
Duty**	Continuous	Continuous	Intermittent
Amps***	0.375	0.190	0.280 - 0.565
Sound	Silent	Silent	Buzz
Static / Dynamic Strength	1000 lbs / 70 lbs		
Endurance	250,000 cycles (L	JL tested)	
Latch Throw	½" or 5/8"		
Standards Compliance	UL294, UL1034,	UL and ULC listed	

<sup>\*</sup> Fail Safe – Lock or locking device that remains unlocked on loss of power Fail Secure – Lock or locking device that remains locked on loss of power (also known as Non-Fail Safe (NFS))

10STRIKECU	UL / ULC Listed, universal cylindrical, electric strike with three faceplates for aluminum, hollow metal, and wood frame installations
10STRIKERE	UL / ULC Listed, surface-mounted, electric strike for rim exit device

<sup>\*\*</sup> Intermittent Duty – Energized less than 1 minute with duty ratio 1:5 Continuous Duty – Energized 1 minute or more

<sup>\*\*\*</sup> Amp ratings are based on maximum current draw at 50 °F and include initial powerup current



## **ELECTRIC STRIKES**

UL LISTED ELECTRIC STRIKES FOR THE US MARKET

#### **Modular Faceplate Options**

Three modular faceplates for the most common door types: hollow metal, aluminum, and wood

#### **Standards Compliant**

UL294 and UL1034 listed Universal Cylindrical and Rim Exit strikes

#### Configurable

The non-handed, fully reversible design is field selectable to 12 or 24 VDC and field reversible with a fail-safe or fail-secure mode



# SEA SEA SEA

#### **Durable**

UL tested to 250,000 cycles, factory-tested to 1,000,000 cycles

#### **UL Listed**

Universal Cylindrical strikes are rated to 1000 lbs static and 70 lbs dynamic (50 lbs dynamic for CUV model)

Rim Exit strikes are rated to 1500 lbs static and 70 dynamic

#### **TECHNICAL SPECIFICATIONS**

Mode*	Fail-safe, Fail-sec	Fail-safe, Fail-secure	
Voltage	12 VDC	24 VDC	
Duty**	Continuous	Continuous	
Amps ***	0.540	0.270	
Sound	Silent	Silent	
Static / Dynamic Strength	1500 lbs / 70 lbs	5	
Endurance	250,000 cycles (	UL tested) / 1,000,000 cycles (factory tested)	
Latch Throw	½" or ¾"		
Standards Compliance	UL294, UL1034,	UL Listed	
10STRIKECUV			
Mode*	Fail-safe, Fail-sed	ture	
Voltage	12 VDC	24 VDC	
Duty**	Continuous	Continuous	
Amps ***	0.300	0.150	
Sound	Silent	Silent	
Static / Dynamic Strength	1000 lbs / 70 lbs	5	
Endurance	250,000 cycles (	UL tested) / 1,000,000 cycles (factory tested)	
Latch Throw	%16" (15 mm ma	x)	
Standards Compliance	UL294, UL1034,	UL Listed	

<sup>\*</sup> Fail Safe – Lock or locking device that remains unlocked on loss of power Fail Secure – Lock or locking device that remains locked on loss of power (also known as Non-Fail Safe (NFS))

10STRIKECUV	UL Listed, universal cylindrical, electric strike
10STRIKEREV12	UL Listed, rim exit electric strike (½")
10STRIKEREV34	UL Listed, rim exit electric strike (¾")

<sup>\*\*</sup> Intermittent Duty – Energized less than 1 minute with duty ratio 1:5 Continuous Duty – Energized 1 minute or more

<sup>\*\*\*</sup> Amp ratings are based on maximum current draw at 50 °F and include initial powerup current

## **KEYSWITCHES**

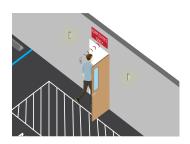
ACCESS-CONTROL SWITCH PLATE

#### **Vandal Resistant**

Aluminum, wall plate with tamper-resistant screws

#### **Multiple Plate Sizes**

Available in jamb and single-gang wall plates or double-gang combo-plate





#### **TECHNICAL SPECIFICATIONS**

Technology	Mechanical key access
<b>Faceplate Dimensions</b>	
Jamb	1 $\frac{3}{4}$ " (W) × 4 $\frac{3}{4}$ " (H) × $\frac{1}{4}$ " (D)
Single	$2^{1/2}$ " (W) × $4^{3/4}$ " (H) × $1/4$ " (D)
Combo-plate	$4\frac{1}{2}$ " (W) × $4\frac{1}{2}$ " (H) × $\frac{1}{4}$ " (D)
Visual Style (combo plate only)	Accessibility symbol and "Push To Open" text
Material	Aluminum
Switch Rating	6 A at 125 VAC or 3 A at 250 VAC
Mortise Cylinder*	1 1/8" cylinder with straight cam required

<sup>\*</sup> NOT INCLUDED – Requires part 10CYLINDERKA or 10CYLINDERKD





#### **Keyswitch Override**

Combo plate allows for independent operation of the push plate and keyswitch, or allows the keyswitch to activate or disable the push plate

#### **Selectable Power Consumption**

Capable of switching 6A at 124 VAC or 3A at 250 VAC



#### **PRODUCT SERIES**

10KEYSWITCHONF	Maintained keyswitch - single gang $3" \times 4 \frac{3}{4}" \times \frac{1}{2}"$
	Mortise cylinder not included
10KEYSWITCHMOM	Momentary keyswitch - single gang 3" $\times$ 4 $\frac{3}{4}$ " $\times$ $\frac{1}{2}$ "
	Mortise cylinder not included
10JAMBSWITCHONF	Maintained keyswitch - jamb 1 ¾" × 4 ¾" × ½"
	Mortise cylinder not included
10JAMBSWITCHMOM	Momentary keyswitch - jamb 1 ¾" × 4 ¾" × ½"
	Mortise cylinder not included
10COMBOPLATE	Jamb push plate combined with maintained keyswitch on a double-gang faceplate
	Mortise cylinder not included
10COMBOPLATEMOM	Jamb push plate combined with momentary keyswitch on a double-gang faceplate
	Mortise cylinder not included
10CYLINDERKA	1 ½" mortise cylinder, Schlage C Keyway, keyed alike
10CYLINDERKD	1 1/8" mortise cylinder, Schlage C Keyway, keyed differently
20.2021	ON / OFF switch for 10KEYSWITCHONF and 10JAMBSWITCHONF
20.2020	Momentary switch for 10KEYSWITCHMOM and 10IAMBSWITCHMOM

#### **MOUNTING OPTIONS**

10BOX24SGSM	Standard single-gang, surface-mount box (2 $^{3}\!\!4$ " × 4 $^{1}\!\!/_{2}$ ")
10BOXDGSM	Surface-mount box, double gang



## **PIEZO BUTTON**

HEAVY DUTY, PIEZOELECTRIC PUSH BUTTON

#### **Adjustable Hold Time**

1 to 40 seconds, user-adjustable output hold time

#### **Selectable Modes**

Can be configured to fail-safe or fail-secure

#### NO or NC

Can be wired normally open or normally closed





# PUSH PUSH TO EXIT

#### **Customizable Illumination**

LED illumination can be customized to user preference

#### **Vandal Resistant**

Vandal- and tamper-resistant design

#### **TECHNICAL SPECIFICATIONS**

Technology	Piezoelectric
<b>Faceplate Dimensions</b>	
Single Gang	2 <sup>3</sup> / <sub>4</sub> " (W) × 4 ½" (H)
LED	Illuminated red/green ring that signals activation (can also be disabled)
Faceplate Material	Stainless steel
Hold Time Range	1 – 40 s (adjustable)
Voltage Input	12 – 24 VDC (auto-sensing)
Norm Conformity	IP65

10PIEZO241	Piezoelectric push button, single gang "Push To Exit" text
10BOX24SGSM	Standard, single-gang, surface-mount box (2 $^{3}\!\!/_{4}$ " $\times$ 4 $^{1}\!\!/_{2}$ ")



## **PNEUMATIC PUSH BUTTONS**

ACCESS CONTROL PUSH BUTTON WITH MECHANICAL-PNEUMATIC **HOLD TIME** 

#### **Customizable**

Adjustable time delay of 2 to 60 seconds

#### **Standards Compliant**

Listed UL508 / CSA C22.2 No 14-10 with MET LABS, File #E113051

#### **Various Styles**

Buttons available in 1 % inch (standard) or 2 inch (large) sizes







#### **TECHNICAL SPECIFICATIONS**

Technology	Pneumatic
Faceplate Dimensions	
Single	$2^{3}/4''$ (W) × $4^{1}/2''$ (H)
Jamb	$1^{3}/4''$ (W) × $4^{1}/2''$ (H)
Visual Style	Red button with "Push to Exit" text Blue button with accessibility logo Green button with "Push to Exit" text
Materials	
Faceplate	Stainless steel
Button	Colored, anodized aluminum
Switch Rating	5 A at 125 VAC
Time Range	2 – 60 s ±15%, adjustable
Repeat Accuracy	±5% at 72 °F
Operating Temperature	-15 – 120 °F
	Rated for indoor use only
Timer Life	1,000,000 operations



#### **Meet Your Application Needs**

Available in a variety of combinations of color, text, and logo (upon request)

#### **Tested to Last**

Tested to perform greater than 1 million operations



#### **PRODUCT SERIES**

10ACPBDA1	2" jamb, red button, text only
10ACPBDA2	2" single-gang, red button, text only
10ACPBDA3	1 %" jamb, red button, text only
10ACPBDA4	1 %" single-gang, red button, text only
10ACPBDA5	2" jamb, blue button, logo only
10ACPBDA6	2" single-gang, blue button, logo only
10ACPBDA7	1 %" jamb, blue button, logo only
10ACPBDA8	1 %" single-gang, blue button, logo only
10ACPBDA9	2" jamb, green button, text only
10ACPBDA10	2" single-gang, green button, text only
10ACPBDA11	1 %" jamb, green button, text only
10ACPBDA12	1 %" single-gang, green button, text only

#### **MOUNTING OPTIONS**

10BOXJAMBST	Surface-mount, jamb box - hardwired only (1 $\sqrt[3]{4}$ " $\times$ 4 $\sqrt[1]{2}$ " jamb)
10BOX24SGSM	Standard single-gang, surface-mount box (2 $^{3}4" \times 4 ^{1}2"$ )



## **UL LISTED GATELOCKS**

WEATHER-RESISTANT, ELECTROMAGNETIC LOCK

#### **Multiple Mounting Options**

Available in front or side mount with a 1200 lb holding force

#### **Easy-to-Mount**

Front-mount model comes with a  $^{3}\!/_{\!4}$  inch male NPS threaded conduit fitting

#### **Lock Status Sensor**

Built-in remote lock status sensor with an output relay





#### **Additional Protection**

Built-in surge protection

#### **Withstands the Elements**

Weather-resistant, stainless steel housing makes these locks suitable for outdoor applications

#### **TECHNICAL SPECIFICATIONS**

10GL1200R	
<b>Door Configuration</b>	Sliding gate, front mount
Holding Force	1200 lb
Input Voltage	12 / 24 VDC (UL Listed power supply recommended)
Current Draw	500 mA at 12 VDC 250 mA at 24 VDC
Relay Switch	250 mA at 12 VDC 125 mA at 24 VDC
Dimensions	8 <sup>3</sup> / <sub>4</sub> " (W) × 2 <sup>1</sup> / <sub>2</sub> " (H) × 1 <sup>5</sup> / <sub>8</sub> " (D)
Material	Stainless steel
Sensor	Lock status sensor with relay output
Cable Specifications	24 AWG, 7-conductor cable, 3 ½'
Norm Conformity	UL and ULC ANSI 156.10 NEMA 4 / IP65
Conduit Fitting (10GL1200R ONLY)	<sup>3</sup> / <sub>4</sub> " NPS conduit fitting 14 threads per inch
10GL1200SR	
Door Configuration	Sliding door / gate, side mount
Holding Force	1200 lb
Input Voltage	12 / 24 VDC (UL Listed power supply recommended)
Current Draw	500 mA at 12 VDC 250 mA at 24 VDC
Relay Switch	250 mA at 12 VDC 125 mA at 24 VDC
Dimensions	8 <sup>3</sup> / <sub>4</sub> " (W) × 2 <sup>1</sup> / <sub>2</sub> " (H) × 1 <sup>5</sup> / <sub>8</sub> " (D)
Material	Stainless steel
Sensor	Lock status sensor with relay output
Cable Specifications	24 AWG, 7-conductor cable, 3 ½'
Norm Conformity	UL and ULC ANSI 156.10 NEMA 4 / IP65

10GL1200R	UL / ULC Listed, 12 / 24 VDC, front-mounted, 1200 lb
10GL1200SR	UL / ULC Listed, 12 / 24 VDC, side-mounted, 1200 lb
10LZBRGATE1200	(1) "L" bracket (1) "Z" bracket
10PS12-24	UL / ULC Listed power supply
10PS12-24D	UL / ULC Listed power supply with backup circuit (1.75 A) battery NOT included



## **SUPPORT & SERVICES**

#### WEBSITE

Our website sources a multitude of product material, technology breakdowns, contact and general info.

us.BEAsensors.com/en/

#### **BEATOOLS**

Tools at your fingertips. BEA has developed a collection of product-specific mobile apps and online tools to assist you before and during the installation process.

us.BEAsensors.com/en/BEA-tools/

#### **CONTINUED EDUCATION**

BEA is a member of the American Association of Automatic Door Manufacturers (AAADM) and is listed as a certified trainer by AAADM. Additionally, our Sensor Integration School offers a comprehensive program designed to educate technicians on the integration of sensors and devices with automatic doors. BEA's highly trained staff are capable of providing the most effective and complete service possible.

us.BEAsensors.com/en/trainings/

#### **WEBINARS**

BEA offers weekly online webinars on specific BEA products. Sign up to participate in a scheduled training or contact us to schedule a private webinar for your team.

us.BEAsensors.com/en/training/product-webinars/

#### **DOWNLOADS**

Need the latest cut sheet or marketing brochure? With our downloads area, you have the ability to access all relevant material in one place.

us.BEAsensors.com/en/downloads-area/

#### **EVENTS**

Visit BEA onsite where we will be displaying our services and solutions!

us.BEAsensors.com/en/news/BEA-events/

#### **YOUTUBE**

At BEA Americas, our team is inspired and empowered to provide advanced sensor solutions which help to grow a safe and convenient automated world. We have taken an innovative approach to enhance customer support and engagement by creating a dedicated YouTube channel. Our videos provide customers and technicians with comprehensive guidance on our diverse range of products and solutions. From product showcases to technical troubleshooting, customers can conveniently access valuable information at their fingertips.

YouTube.com/user/BEAsensors/

















### **1200LB MAGLOCKS**

MAGLOCKS WITH ADJUSTABLE RELOCK TIME DELAY AND LOCK (BOND) STATUS SENSOR

#### **User-Configurable**

Adjustable zero to 90 second relock time delay

#### **Enhanced Access Control / Monitoring**

Lock (bond) status sensor with visible LED offers either normally open or normally closed output configurations

#### UL 294 Listed\*

Listed for access control systems and must be used with a UL Listed power supply





# BEA .

#### **Anti-Tampering**

The security screw on the front face blocks access to the bottom of the elctromagnetic lock preventing tampering or dismounting

#### **Convenient Packages Available**

Available in access control packages with sensor, logic module, actuator, and MAGLOCK

\* This product is UL294-listed up to 1,000 lb static strength

#### **TECHNICAL SPECIFICATIONS**

10MAGLOCK1UL	
Lock	Single
Input Voltage	12 or 24 VDC
Relay Rating	1.0 A at 24 VDC resistive
Relay Power Factor	1
Reed Switch Rating	Dry Contacts: 3W (switching contact 0.25 amps max, switching voltage 30VDC max; resistive load)
Reed Switch Power Factor	1
Power Consumption	500 mA at 12 VDC 250 mA at 24 VDC
Dimensions	10 <sup>15</sup> / <sub>32</sub> " (W) × 2 <sup>7</sup> / <sub>8</sub> " (H) × 1 <sup>37</sup> / <sub>64</sub> " (D)
Certification	UL294 (up to 1,000 lb static strength) File #BP10577
Operating Temperature	32 – 120 °F
Operating Humidity	0 – 85%
10MAGLOCK5UL	
Lock	Double
Input Voltage	12 or 24 VDC
Relay Rating	1.0 A at 24 VDC resistive
Relay Power Factor	1
Reed Switch Rating	Dry Contacts: 3W (switching contact 0.25 amps max, switching voltage 30VDC max; resistive load)
Reed Switch Power Factor	1
Power Consumption	500 mA at 12 VDC 250 mA at 24 VDC each
Dimensions	21" (W) $\times$ 2 $\frac{7}{8}$ " (H) $\times$ 1 $\frac{37}{64}$ " (D)
Certification	UL294 (up to 1,000 lb static strength) File #BP10577
Operating Temperature	32 – 120 °F
Operating Humidity	0 – 85%

#### **PRODUCT SERIES**

10MAGLOCK1UL	1,200 lb holding force / Single UL Listed 294 @ 1,000 lb static force
10MAGLOCK5UL	1,200 lb holding force / Double UL Listed 294 @ 1,000 lb static force
MAG5LZUL	(2) "L" brackets, (2) "Z" brackets - for single 1200 lb MAGLOCKS
10UBRACKETUL	Bracket kit for mounting a MAGLOCK to a glass door up to $\frac{1}{2}$ " thick
10FILLER12UL	$\frac{1}{2}$ " x $\frac{3}{4}$ " horizontal, right filler plate used to fill or extend door stops - <i>for single locks only</i>
10FILLER14UL	$\frac{1}{4}$ " × $\frac{3}{4}$ " horizontal, right filler plate used to fill or extend door stops - <i>for single locks only</i>
10FILLER34UL	$\frac{3}{4}$ " × $\frac{3}{4}$ " horizontal, right filler plate used to fill or extend door stops - <i>for single locks only</i>
10FILLER58UL	$\%$ " $\times$ $^3$ $\%$ " horizontal filler plate used to fill or extend door stops - <i>for single locks only</i>
10RIMHOUSING1UL	Provides a more aesthetically pleasing look over standard armature plates - for single 1200 lb MAGLOCKS
10SPACER1UL	Vertical "spacer bracket" used when the stop requires the MAGLOCK to be lowered - <i>for single 1200 lb</i> <i>MAGLOCKS</i>
10PS12-24	UL / ULC Listed power supply
10PS12-24D	UL / ULC Listed power supply with backup circuit (1.75 A) - battery NOT included
50.0334	Screw pack for 10MAGLOCK1UL



## **1200LB MAGLOCKS WITH DS**

MAGLOCKS WITH ADJUSTABLE RELOCK TIME DELAY, LOCK (BOND) STATUS SENSOR, AND DOOR STATUS SENSOR

#### **User-Configurable**

Adjustable zero to 90 second relock time delay

#### **Enhanced Access Control / Monitoring**

Lock (bond) status sensor with visible LED offers either normally open or normally closed output configurations

#### UL 294 Listed\*

Listed for access control systems and must be used with a UL Listed power supply





# BEA .

#### **Anti-Tampering**

The security screw on the front face blocks access to the bottom of the elctromagnetic lock preventing tampering or dismounting

#### **Convenient Packages Available**

Available in access control packages with sensor, logic module, actuator, and MAGLOCK

\* This product is UL294-listed up to 1,000 lb static strength.

#### **TECHNICAL SPECIFICATIONS**

10MAGLOCK1ULDS	
Lock	Single
Input Voltage	12 or 24 VDC
Relay Rating	1.0 A at 24 VDC resistive
Relay Power Factor	1
Reed Switch Rating	Dry Contacts: 3W (switching contact 0.25 amps max, switching voltage 30VDC max; resistive load)
Reed Switch Power Factor	1
Power Consumption	500 mA at 12 VDC 250 mA at 24 VDC
Dimensions	10 <sup>15</sup> / <sub>32</sub> " (W) × 2 <sup>7</sup> / <sub>8</sub> " (H) × 1 <sup>37</sup> / <sub>64</sub> " (D)
Certification	UL294 (up to 1,000 lb static strength) File #BP10577
Operating Temperature	32 – 120 °F
Operating Humidity	0 – 85%
10MAGLOCK5ULDS	
Lock	Double
Input Voltage	12 or 24 VDC
Relay Rating	1.0 A at 24 VDC resistive
Relay Power Factor	1
Reed Switch Rating	Dry Contacts: 3W (switching contact 0.25 amps max, switching voltage 30VDC max; resistive load)
Reed Switch Power Factor	1
Power Consumption	500 mA at 12 VDC 250 mA at 24 VDC each
Dimensions	21" (W) $\times$ 2 $\frac{7}{8}$ " (H) $\times$ 1 $\frac{37}{64}$ " (D)
Certification	UL294 (up to 1,000 lb static strength) File #BP10577
Operating Temperature	32 – 120 °F
Operating Humidity	0 – 85%

#### **PRODUCT SERIES**

10MAGLOCK1ULDS	1,200 lb holding force / Single UL Listed 294 @ 1,000 lb static force
10MAGLOCK5ULDS	1,200 lb holding force / Double UL Listed 294 @ 1,000 lb static force
MAG5LZUL	(2) "L" brackets, (2) "Z" brackets - for single 1200 lb MAGLOCKS
10UBRACKETUL	Bracket kit for mounting a MAGLOCK to a glass door up to $\frac{1}{2}$ " thick
10FILLER12UL	$\frac{1}{2}$ " $\times \frac{3}{4}$ " horizontal, right filler plate used to fill or extend door stops - <i>for single locks only</i>
10FILLER14UL	$\frac{1}{4}$ " $\times \frac{3}{4}$ " horizontal, right filler plate used to fill or extend door stops - <i>for single locks only</i>
10FILLER34UL	$\frac{3}{4}$ " x $\frac{3}{4}$ " horizontal, right filler plate used to fill or extend door stops - <i>for single locks only</i>
10FILLER58UL	%" x $%$ " horizontal filler plate used to fill or extend door stops
10RIMHOUSING1UL	Provides a more aesthetically pleasing look over standard armature plates - for single 1200 lb MAGLOCKS
10SPACER1UL	Vertical "spacer bracket" used when the stop requires the MAGLOCK to be lowered - for single 1200 lb MAGLOCKS
10PS12-24	UL / ULC Listed power supply
10PS12-24D	UL / ULC Listed power supply with backup circuit (1.75 A) - battery NOT included
50.0340	Cover plate ONLY with DS switch for 10MAGLOCK1ULDS
50.0342	Cover plate ONLY with DS switch for 10MAGLOCK5ULDS
50.0334	Screw pack for 10MAGLOCK1UL



## **600LB MAGLOCKS**

MAGLOCKS WITH ADJUSTABLE RELOCK TIME DELAY AND LOCK (BOND) STATUS SENSOR

#### **Customizable**

Adjustable zero to 90 second relock time delay

#### **Enhanced Reliability**

Lock status sensor with visible LED offers either normally open or normally closed output configurations

#### **UL Listed**

Input voltage of 12 / 24 VDC, must be used with UL Listed power supply





## BEA \*

#### **Mounting Accessories**

Variety of mounting hardware available

#### **Convenient Packages Available**

Available in access control packages with request-to-exit sensor, logic module, actuator, power supply, and MAGLOCK

#### **TECHNICAL SPECIFICATIONS**

10MAGLOCK3UL	
Lock	Single
Input Voltage	12 or 24 VDC
Relay Rating	1.0 A at 24 VDC resistive
Reed Switch Rating	SPDT 0.5 amp at 30 VAC / VDC resistive
Power Consumption	505 mA × 2 at 12 VDC 260 mA × 2 at 24 VDC
Dimensions	9 $^{27}/_{32}$ " (W) × 1 $^{21}/_{32}$ " (H) × 1" (D)
Certification	UL1034
<b>Operating Temperature</b>	14 – 131 °F
Operating Humidity	0 – 95%
10MAGLOCK6UL	
Lock	Double
Input Voltage	12 or 24 VDC
Relay Rating	1.0 A at 24 VDC resistive
Reed Switch Rating	SPDT 0.5 amp at 30 VAC / VDC resistive
Power Consumption	505 mA × 2 at 12 VDC 260 mA × 2 at 24 VDC
Dimensions	19 <sup>3</sup> / <sub>4</sub> " (W) × 1 <sup>21</sup> / <sub>32</sub> " (H) × 1" (D)
Certification	UL1034
Operating Temperature	14 – 131 °F
Operating Humidity	0 – 95%

#### **PRODUCT SERIES**

10MAGLOCK3UL	600 lb holding force / Single UL Listed 294 @ 500 lb static force
10MAGLOCK6UL	600 lb holding force / Double UL Listed 294 @ 500 lb static force
MAG6LZUL	(2) "L" brackets, (2) "Z" brackets - for single 600 lb MAGLOCKS
10UBRACKETUL	Bracket kit for mounting a MAGLOCK to a glass door up to ½" thick
10FILLER12UL	$\frac{1}{2}$ " x $\frac{3}{4}$ " horizontal, right filler plate used to fill or extend door stops - <i>for single locks only</i>
10FILLER14UL	$\frac{1}{4}$ " x $\frac{3}{4}$ " horizontal, right filler plate used to fill or extend door stops - <i>for single locks only</i>
10FILLER34UL	$\frac{3}{4}$ " × $\frac{3}{4}$ " horizontal, right filler plate used to fill or extend door stops - <i>for single locks only</i>
10FILLER58UL	$\%$ " × $^3$ 4" horizontal filler plate used to fill or extend door stops - for single locks only
10RIMHOUSING3UL	Provides a more aesthetically pleasing look over standard armature plates - for single 600 lb MAGLOCKS
10SPACER3UL	Vertical "spacer bracket" used when the stop requires the MAGLOCK to be lowered - <i>for single</i> 600 lb MAGLOCKS
10PS12-24	UL / ULC Listed power supply
10PS12-24D	UL / ULC Listed power supply with backup circuit (1.75 A) - battery NOT included
50.0335	Screw pack for 10MAGLOCK3UL
50.0335	Screw pack for 10MAGLOCK3UL



## **600LB MAGLOCKS WITH DS**

MAGLOCKS WITH ADJUSTABLE RELOCK TIME DELAY, LOCK STATUS SENSOR, AND DOOR STATUS SENSOR

#### **Customizable**

Adjustable zero to 90 second relock time delay

#### **Enhanced Reliability**

Lock status sensor with visible LED offers either normally open or normally closed output configurations

#### **UL Listed**

Input voltage of 12 / 24 VDC, must be used with UL Listed power supply





## BEA \*

#### **Mounting Accessories**

Variety of mounting hardware available

#### **Convenient Packages Available**

Available in access control packages with sensor, logic module, actuator, and MAGLOCK

#### **TECHNICAL SPECIFICATIONS**

10MAGLOCK3ULDS	
Lock	Single
Input Voltage	12 or 24 VDC
Relay Rating	1.0 A at 24 VDC resistive
Relay Power Factor	1
Reed Switch Rating	Dry Contacts: 3W (switching contact 0.25 amps max, switching voltage 30VDC max; resistive load)
<b>Reed Switch Power Factor</b>	1
Power Consumption	500 mA at 12 VDC 250 mA at 24 VDC
Dimensions	10 $\frac{1}{2}$ " (W) × 2 $\frac{7}{8}$ " (H) × 1 $\frac{1}{2}$ " (D)
Certification	UL1034
Operating Temperature	14 – 131 °F
Operating Humidity	0 – 95%
10MAGLOCK6ULDS	
Lock	Double
Input Voltage	12 or 24 VDC
Relay Rating	1.0 A at 24 VDC resistive
Relay Power Factor	1
Reed Switch Rating	Dry Contacts: 3W (switching contact 0.25 amps max, switching voltage 30VDC max; resistive load)
Reed Switch Power Factor	1
Power Consumption	505 mA × 2 at 12 VDC 260 mA × 2 at 24 VDC
Dimensions	21" (W) × 2 <sup>7</sup> /8" (H) × 1 <sup>1</sup> / <sub>2</sub> " (D)
Certification	UL1034
Operating Temperature	14 – 131 °F
Operating Humidity	0 – 95%

#### **PRODUCT SERIES**

10MAGLOCK3ULDS	600 lb holding force / Single UL Listed 294 @ 500 lb static force
10MAGLOCK6ULDS	600 lb holding force / Double UL Listed 294 @ 500 lb static force
MAG6LZUL	(2) "L" brackets, (2) "Z" brackets - for single 600 lb MAGLOCKS
10UBRACKETUL	Bracket kit for mounting a MAGLOCK to a glass door up to $\frac{1}{2}$ " thick
10FILLER12UL	$\frac{1}{2}$ " $\times$ $\frac{3}{4}$ " horizontal, right filler plate used to fill or extend door stops - <i>for single locks only</i>
10FILLER14UL	$\frac{1}{4}$ " $\times \frac{3}{4}$ " horizontal, right filler plate used to fill or extend door stops - <i>for single locks only</i>
10FILLER34UL	$\frac{3}{4}$ " × $\frac{3}{4}$ " horizontal, right filler plate used to fill or extend door stops - <i>for single locks only</i>
10FILLER58UL	$\mbox{\ensuremath{\%}}\mbox{\ensuremath{\text{8}}}\mbox{\ensuremath{\text{**}}}\mbox{\ensuremath{\text{x}}}\mbox{\ensuremath{\text{3}}}\mbox{\ensuremath{\text{4}}}\mbox{\ensuremath{\text{**}}}\m$
10RIMHOUSING3UL	Provides a more aesthetically pleasing look over standard armature plates - for single 600 lb MAGLOCKS
10SPACER3UL	Vertical "spacer bracket" used when the stop requires the MAGLOCK to be lowered - for single 600 lb MAGLOCKS
10PS12-24	UL / ULC Listed power supply
10PS12-24D	UL / ULC Listed power supply with backup circuit (1.75 A) - battery NOT included
50.0341	Cover plate ONLY with DS switch for 10MAGLOCK3ULDS
50.0343	Cover plate ONLY with DS switch for 10MAGLOCK6ULDS
50.0335	Screw pack for 10MAGLOCK3UL



## **UNIVERSAL KEYPAD FAMILY**

ACCESS-CONTROL KEYPADS FOR INDOOR AND OUTDOOR USE



Allows for up to 1100 user codes

#### **Ideal for Outdoor Environments**

IP66 rating ensures the device will withstand the elements in harsh industrial and outdoor environments

#### **Tamper Alarm**

Incorporates a tamper alarm feature as a standard option





#### **TECHNICAL SPECIFICATIONS**

Supply Voltage	12 – 24 VAC/VDC <b>DO NOT EXCEED 30 VDC or 24 VAC</b>
Standby Current	≤ 30 mA
Working Current	≤ 160 mA
Max User Codes	1100
Zone 1	1000 users
Zone 2	100 users
Relock Time	0 – 99 s
Output  Max. Contact Voltage  Max. Contact Current  Max. Switching Power	2 Form-C relays (free of potential change-over contact) 42 VAC / VDC 1 A (resistive) 30 W (VDC) / 48 VA (VAC)
Cable Length	3'
<b>Operating Temperature</b>	-22 – 158 °F
Operating Humidity	0 – 95% (non-condensing)
IP Rating	IP66 (waterproof and dust proof)
Dimensions	
Single gang	$3''$ (W) $\times 4^{7/10}''$ (H) $\times 9/10''$ (D)
Slim-line	1 $\frac{7}{10}$ " (W) × 5 $\frac{9}{10}$ " (H) × $\frac{19}{20}$ " (D)
Certifications	CE, RoHS
Backlight	Blue keypad illumination



#### **Multiple Relays**

Two-zone feature provides 2 relays and 2 exit button outputs for two-zone applications

#### **Improved Visibility**

Back-lit numbers allow for ease of use in dimly lit areas



10KEYPADU	Universal keypad for indoor and outdoor use
10KEYPADUSL	Universal, slimline keypad for indoor and outdoor use





## **LED SIGNAL COLUMN LIGHTS**

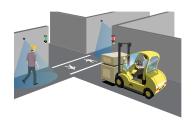
UL LISTED, SINGLE-COLOR LIGHT

#### **Standards Compliant**

UL Listed

#### **Ideal For Harsh Environments**

IP67 rating for maximum performance in harsh environments







#### **Three Highly Visible Colors**

Available LED colors include red, green, and yellow

#### **Selectable Voltage**

18 to 30 VDC supply voltage





#### **TECHNICAL SPECIFICATIONS**

Supply Voltage	18 – 30 VDC
Indicator Response Time	
Off Response	10 ms
On Response	10 ms
LED	Red, green, yellow
Connector	78"
	4-wire integral cable
Operating Temperature	-40 – 122 °F
	95% at 122 °F maximum relative humidity
	(non-condensing)
Degree of Protection	IP67
Norm Conformity	CE, UL1598 listed, UL8750 listed

10LIGHTC-G	Green LED column light for signaling applications
10LIGHTC-Y	Yellow LED column light for signaling applications
10LIGHTC-R	Red LED column light for signaling applications
10LIGHTC-YA	Yellow LED column light with audible signal for signaling applications
10LIGHTC-RA	Red LED column light with audible signal for signaling applications
10LIGHTBRACKET	LED SIGNAL LIGHT bracket
10PS12-24	UL / ULC Listed power supply





## **LED SIGNAL MODULAR LIGHTS**

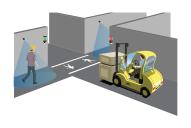
UL LISTED, BUILD-YOUR-OWN LIGHTS AND AUDIBLE ALARM

#### **Highly Durable Indicators**

UL Listed and IP65 rated to meet the needs of any application

#### **Adjustable Settings**

Light units can be programmed to pulse at a rate of 1 ½ or 3 times per second or remain steady





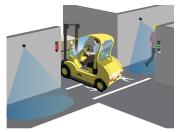
#### **Optional Alerts**

Optional, audible alarm unit offers secondary alert method with chirp, siren, continuous, and 1 ½ beeps-per-second configuration settings

#### **Flexible Indication Solution**

Base unit and bracket are designed for a variety of installation





#### **TECHNICAL SPECIFICATIONS**

Supply Voltage	12 – 30 VDC
Indicator Response Time	
Off Response	150 μs at 12 – 30 VDC
On Response	180 mSec at 12 VDC; 50 mSec at 30 VDC
LED	Red, green, yellow
Light Flash Rates	1.5 Hz ±10% 3 Hz ±10%
Audible Alarm	2.6 KHz ±250 Hz oscillation frequency; maximum intensity 92 dB at 39.6 in
Audible Adjustment	Rotate the alarm cover; Open to closed is 8 db
Connector	78"
	8-wire integral cable
Operating Temperature	-40 – 122 °F
	95% at 122 °F maximum relative humidity
	(non-condensing)
Degree Of Protection	NEMA 4 / IP65
Norm Conformity	CE, UL1598 Listed and UL8750 Listed
Dimensions	
Base	2 <sup>3</sup> / <sub>4</sub> " Ø × 1 <sup>3</sup> / <sub>8</sub> " (H)
Light Segment	2 <sup>3</sup> / <sub>4</sub> " Ø × 2 <sup>3</sup> / <sub>8</sub> " (H)
Audible Segment	$2^{3/4}$ " $\emptyset \times 2^{3/4}$ " (H)

10LIGHT-TBASE	LED Modular Signal Light, LED signal base
10LIGHT-TR	LED Modular Signal Light - single color unit (red)
10LIGHT-TG	LED Modular Signal Light - single color unit (green)
10LIGHT-TW	LED Modular Signal Light - single color unit (white)
10LIGHT-TY	LED Modular Signal Light - single color unit (yellow)
10LIGHT-A	Modular, LED signal, audible segment
10LIGHTBRACKET	LED Signal Light bracket
10LIGHTBRACKET-TL70	LED Signal Light bracket - 30mm, 12 gauge SS, curved mounting
10PS12-24	UL / ULC Listed power supply



## **LED SIGNAL TRAFFIC LIGHTS**

RUGGED, COST-EFFECTIVE SIGNALS FOR WARNING INDICATION SYSTEMS

#### **Standards Compliant**

Single-light model rated IP67; double-light model rated IP65

#### **Highly Visible**

Intense levels of light output for outdoor applications









#### **Customizable**

Controlled field of view for signage and narrow-lane use

#### **Dual-Indicator Modes**

One- and two-indicator models available





#### **TECHNICAL SPECIFICATIONS**

Supply Voltage	15 – 30 VDC
Indicators	13 30 VDC
Off Response	10 ms max.
On Response	10 ms max.
LED	
One Indicator	Red or green
Two Indicator	Red and green
Connections	Field wired
Operating Temperature	-40 – 122 °F
Material	PC
Degree of Protection	
Single	IP67
Double	IP65
Norm Conformity	CE

10LIGHTS-G	Traffic, green LED signal light
10LIGHTS-R	Traffic, red LED signal light
10LIGHTD-RG	Traffic, red/green LED signal light
10PS12-24	UL / ULC Listed power supply

### **ACCESS CONTROL PACKAGES**

SINGLE-DOOR APPLICATION PACKAGES

#### **Easy Ordering**

Packages for request-to-exit applications

#### Customizable

Package includes your choice of request-to-exit sensors, 600 or 1200 lb MAGLOCK, coupled with door logic and power





# BEA

#### **Easy Installation**

Wiring diagram included

#### **PRODUCT SERIES**

## 10ACP12 Single Door Package 1 utilizes our R2E-100 with focused active infrared presence detection pattern for secure request-to-exit and a 1200 lb MAGLOCK (1) 10PS12-24 - UL power supply, filtered and regulated

- (1) 10MAGLOCK1UL 1200 lb MAGLOCK (pg 76)
- (1) 10R2E100 Request-to-Exit sensor (pg 36)
- (1) 10ACPBSS1 "Push-to-Exit" button (pg 78)
- (1) 10BR3X programmable, 3-relay, logic module (pg 54)

## **10ACP12F** Single Door Package 2 utilizes our FLY with adjustable, passive infrared presence detection pattern for secure request-to-exit and a 1200 lb MAGLOCK

- (1) 10PS12-24 UL power supply, filtered and regulated
- (1) 10MAGLOCK1UL 1200 lb MAGLOCK (pg 76)
- (1) 10FLYKITB Request-to-Exit sensor (pg 18)
- (1) 10ACPBSS1 "Push-to-Exit" button (pg 78)
- (1) 10BR3X programmable, 3-relay, logic module (pg 54)

10ACP6	Single Door Package 3 utilizes our R2E-100 with focused active infrared presence detection pattern for secure request-to-exit and a 600 lb MAGLOCK
	(1) 10PS12-24 - UL power supply, filtered and regulated
	(1) 10MAGLOCK3UL - 600 lb MAGLOCK (pg 91)
	(1) 10R2E100 - Request-to-Exit sensor (pg <b>36</b> )
	(1) 10ACPBSS1 - "Push-to-Exit" button (pg 78)
	(1) 10BR3X - programmable, 3-relay, logic module (pg 54)
10ACP6F	Single Door Package 4 utilizes our FLY with adjustable, passive infrared presence detection pattern for secure request-to-exit and a 600 lb MAGLOCK
	(1) 10PS12-24 - UL power supply, filtered and regulated
	(1) 10MAGLOCK3UL - 600 lb MAGLOCK (pg 91)
	(1) 10FLYKITB - Request-to-Exit sensor (pg 18)
	(1) 10ACPBSS1 - "Push-to-Exit" button (pg 78)

(1) 10BR3X - programmable, 3-relay, logic module (pg 54)



### **LOW-ENERGY PACKAGES**

ALL-IN-ONE, REACTIVATION PACKAGES FOR LOW-ENERGY DOORS



Convenient solution that includes secondary reactivation and enhanced door logic

#### **Logic Control**

LE21 or BR3-X logic disables SUPERSCAN-T until the door is activated by a knowing act device



#### **PRODUCT SERIES**

- **LE PACKAGE 6** (1) 10SSTII (length) SUPERSCAN-T II door-mounted, safety sensor (pg 37 - 39)
  - (1) primary, (1) secondary
  - 34 1/2" end cap to end cap (for 36" doors)
  - (1) 10BR3X programmable, 3-relay, logic module (pg 54)
  - (1) 10SWITCH75 magnetic, door position switch ½" gap, NO / NC, SPDT 7/16" diameter, flush mount

**SECURITY** 

- LE PACKAGE 6 (1) 10SSTII (length) SUPERSCAN-T II door-mounted, safety sensor (pg 37 - 39)
  - (1) primary, (1) secondary
  - 34 1/2" end cap to end cap (for 36" doors)
  - (1) 10BR3X programmable, 3-relay, logic module (pg 54)
  - (1) 10SWITCH75 magnetic, door position switch
    - ½" gap, NO / NC, SPDT
    - 7/16" diameter, flush mount



#### **Door Monitoring**

Door position switch monitors state of door to enable / disable sensors



## **PUSH PLATE PACKAGES**

ALL-IN-ONE PACKAGE CONTAINING PUSH PLATES, WIRELESS TRANSMITTERS AND RECEIVERS, AND MOUNTING OPTIONS

#### **Customizable**

Flexible solution offering variety of push plate, mounting, and wireless options





## PUSH TO OPEN

#### **One-Box Solution**

Convenient solutions available

#### **PRODUCT SERIES**

PANTHER 1	(1) PANTHER plate, any style (pg 66)
	(1) 10RD433 or 10RD433EH receiver (pg 58) or 10RD900 receiver (pg 59)
PANTHER 2	(2) PANTHER plate, any style (pg 66)
	(1) 10RD433 or 10RD433EH receiver (pg 58) or 10RD900 receiver (pg 59)
PUSH PLATE 1	Choice of (1) PUSH PLATE, any style* (pg 61 – 68)
	(1) Matching surface- or flush-mount box
	(1) Receiver and (1) Transmitter, any frequency (pg 57 – 59)
	*does NOT include LPR36, JAMB, VESTIBULE, PANTHER, or MAGIC SWITCH
PUSH PLATE 2	Choice of (2) PUSH PLATES, any style* (pg 61 – 68)
	(2) Matching surface- or flush-mount boxes
	(1) Receiver and (2) Transmitters, any frequency (pg 57 – 59)
	*does NOT include LPR36, JAMB, VESTIBULE, PANTHER, or MAGIC SWITCH
PUSH PLATE 3	Choice of (1) jamb PUSH PLATE, any style (pg 64)
	(1) Matching surface-mount box
	(1) Receiver and (1) Mini transmitter, any frequency (pg 57 – 59)
PUSH PLATE 4	Choice of (2) jamb PUSH PLATES, any style (pg 64)
	(2) Matching surface-mount boxes
	(1) Receiver and (2) Mini transmitters, any frequency (pg 57 – 59)
PUSH PLATE 45	Choice of (2) 4 ½ in square PUSH PLATES, any style (pg 61)
ONE-BOX SOLUTION	(2) 4 ½ " square, surface-mount boxes
222011011	(1) 433 MHz receiver and (2) 3-volt or 9-volt 433 MHz transmitters (pg 58)

PUSH PLATE	Choice of (2) 4 ½ in square PUSH PLATES, any style (pg 61)
45 900 ONE-BOX	(2) 4 ½" square, surface-mount boxes
SOLUTION	(1) 10TD900PB transmitter and (1) 10RD900 receiver (pg 59)
<b>VESTIBULE 900</b>	(1) 10PBDGP1 - Vestibule PUSH PLATE (pg 68)
	(1) 4 $\frac{3}{4}$ " square, surface-mount box
	(2) PUSH PLATE options* with matching mounting boxes (pg 61 $-$ 68)
	(4) 10TD900PB - 3-volt transmitters and (2) 10RD900 receivers (pg 59)
	*options include (2) PBS series, (2) PBS45 series, (2) PBS6 series, (2) PBR45 series, (2) PBR series or (2) PBJ series
VESTIBULE	(1) 10PBDGP1 - Vestibule PUSH PLATE (pg 68)
PACKAGE	(1) 4 <sup>3</sup> / <sub>4</sub> " square, surface-mount box
	(2) PUSH PLATE options* with matching mounting boxes (pg 61 $-$ 68)
	(4) 3-volt OR 9-volt transmitters and (2) 10RD433 or 10RD433EH receivers (pg <b>58</b> )
	*options include (2) PBS series, (2) PBS45 series, (2) PBS6 series, (2) PBR45 series, (2) PBR series or (2) PBJ series
VESTIBULE	(1) 10PBDGP1 - Vestibule PUSH PLATE (pg 68)
PACKAGE 9V	(1) 4 <sup>3</sup> / <sub>4</sub> " square, surface-mount box
	(2) PUSH PLATE options* with matching mounting boxes (pg 61 $-$ 68)
	(4) 10TD433PB9V - 9-volt transmitters and (2) 10RD433 or 10RD433EH receivers (pg <b>58</b> )
	*options include (2) PBS series, (2) PBS45 series, (2) PBS6 series, (2)

PBR45 series, (2) PBR series or (2) PBJ series



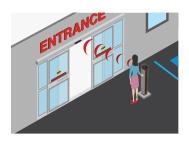
## **SECURITY PUSH PLATE PACKAGES**

CONVENIENT PACKAGES BUILT WITH BEA'S MOST POPULAR PUSH PLATES



#### **Customizable**

Choose from these convenient one-box solutions that include our most popular mounting option, push plate artwork, and wireless transmitters and receivers





#### **One-Box Solutions**

Packages available for vestibule and other common knowing-act applications

PUSH PLATE	(2) 10PBS451 - square PUSH PLATES (pg 61)
45S-433	(2) 10BOX45SQSM - surface-mount boxes
	(2) 10TD433PB9V - 9-volt 433 MHz transmitter (pg 58)
	(1) 10RD433 - 433 MHz receiver (pg 58)
PUSH PLATE	(2) 10PBS451 - square PUSH PLATES (pg 61)
45S-900	(2) 10BOX45SQSM - surface-mount boxes
	(2) 10TD900PB - 900 MHz transmitter (pg 59)
	(1) 10RD900 - 900 MHz receiver (pg 59)
PUSH PLATE	(2) 10PBS451 - square PUSH PLATES (pg 61)
45S-BR2900	(2) 10BOX45SQSM - surface-mount boxes
	(2) 10TD900PB - 900 MHz transmitter (pg 59)
	(1) 10BR2900 - 2-relay, logic module (pg 53)
PUSH PLATE	(2) 10PBS451 - square PUSH PLATES (pg 61)
45S-HW	(2) 10BOX45SQSM - surface-mount boxes
	HARDWIRED SOLUTION ONLY
PUSH PLATE	(2) 10PBS1 - square PUSH PLATES (pg 62)
475 EBA-900	(2) 10BOX475SQSMEBA - surface-mount boxes
	(2) 10TD900PB - 900 MHz transmitter (pg 59)
	(1) 10RD900 - 900 MHz receiver (pg 59)
PUSH PLATE	(2) 10PBS1 - square PUSH PLATES (pg 62)
475S-433	(2) 10BOX475SQSM - surface-mount boxes
	(2) 10TD433PB9V - 9-volt 433 MHz transmitter
	(1) 10RD433 - 433 MHz receiver (pg 58)
PUSH PLATE	(2) 10PBS1 - square PUSH PLATES (pg 62)
475S-900	(2) 10BOX475SQSM - surface-mount boxes
	(2) 10TD900PB - 900 MHz transmitter (pg 59)
	(1) 10RD900 - 900 MHz receiver (pg 59)
PUSH PLATE	(2) 10PBS1 - square PUSH PLATES (pg 62)
475S-BR2900	(2) 10BOX475SQSM - surface-mount boxes
	(2) 10TD900PB - 900 MHz transmitter (pg 59)
	(1) 10BR2900 - 2-relay, logic module (pg 53)
PUSH PLATE	(2) 10PBS1 - square PUSH PLATES (pg 62)
475S-HW	(2) 10BOX475SQSM - surface-mount boxes
	HARDWIRED SOLUTION ONLY

PUSH PLATE	(2) 10PBR1 - round PUSH PLATES (pg 63)
6R-433	(2) 10BOX6RNDSM - surface-mount boxes
	(2) 10TD433PB9V - 9-volt 433 MHz transmitter (pg 58)
	(1) 10RD433 - 433 MHz receiver (pg 58)
PUSH PLATE	(2) 10PBR1 - round PUSH PLATES (pg 63)
6R-900	(2) 10BOX6RNDSM - surface-mount boxes
	(2) 10TD900PB - 900 MHz transmitter (pg 59)
	(1) 10RD900 - 900 MHz receiver (pg 59)
PUSH PLATE	(2) 10PBR1 - round PUSH PLATES (pg 63)
6R-BR2900	(2) 10BOX6RNDSM - surface-mount boxes
	(2) 10TD900PB - 900 MHz transmitter (pg 59)
	(1) 10BR2900 - 2-relay, logic module (pg 53)
PUSH PLATE	(2) 10PBJ1 - jamb PUSH PLATES (pg 64)
JAMB-433	(2) 10BOXJAMBSM - surface-mount boxes
	(2) 10TD433PB9V - 9-volt 433 MHz transmitter (pg 58)
	(1) 10RD433 - 433 MHz receiver (pg <b>56</b> )
PUSH PLATE	(2) 10PBJ1 - jamb PUSH PLATES (pg 64)
JAMB-900	(2) 10BOXJAMBSM - surface-mount boxes
	(2) 10TD900PB - 900 MHz transmitter (pg 59)
	(1) 10RD900 - 900 MHz receiver (pg 59)
VESTIBULE	(1) 10PBDGP1 - vestibule PUSH PLATE (pg 68)
PACKAGE 433	(1) 10BOX475SQSM - surface-mount boxes
	(2) 10PBS1 with matching mounting boxes (pg 62)
	(4) 10TD433PB9V - 9-volt 433 MHz transmitter (pg 58)
	(2) 10RD433 - 433 MHz receiver (pg <b>58</b> )
VESTIBULE	(1) 10PBDGP1 - vestibule PUSH PLATE (pg 68)
PACKAGE 900	(1) 10BOX475SQSM - surface-mount boxes
	(2) 10PBS1 with matching mounting boxes (pg 62)
	(4) 10TD900PB - 900 MHz transmitter (pg 59)
	(2) 10RD900 - 900 MHz receiver (pg <b>59</b> )



## **REQUEST-TO-EXIT PACKAGES**

## CONVENIENT DOOR PACKAGES FOR REQUEST-TO-EXIT APPLICATIONS

#### **Customizable**

Select your choice of MAGLOCK DS (available in either 600 or 1200 lb holding force) and your choice of BEA exit sensor (either R2E-100 or FLY Kit)





#### **One-Box Solutions**

Convenient packages offer superior pricing and whole-door solution

10ACP12DS	(1) 10R2E100 - UL / ULC Listed, active infrared request-to-exit detector specifically designed for access control applications (pg 36)
	(1) 10PS12-24 - UL, filtered and regulated power supply (pg 109)
	(1) 10ACPBSS1 - Push-to-Exit button (pg 78)
	(1) 10BR3X - programmable 3-relay logic module (pg 54)
	(1) 10MAGLOCK1ULDS - 1200 lb MAGLOCK (pg 90)
10ACP6DS	(1) 10R2E100 - UL / ULC Listed, active infrared request-to-exit detector specifically designed for access control applications (pg 36)
	(1) 10PS12-24 - UL, filtered and regulated power supply (pg 109)
	(1) 10ACPBSS1 - Push-to-Exit button (pg 78)
	(1) 10BR3X - programmable 3-relay logic module (pg 54)
	(1) 10MAGLOCK3ULDS - 600 lb MAGLOCK (pg 92)

10ACP12FDS	(1) 10FLYKITB - Request-to-Exit sensor (pg 18)
	(1) 10PS12-24 - UL, filtered and regulated power supply (pg 109)
	(1) 10ACPBSS1 - Push-to-Exit button (pg 78)
	(1) 10BR3X - programmable 3-relay logic module (pg 54)
	(1) 10MAGLOCK1ULDS - 1200 lb MAGLOCK (pg 90)
10ACP12FDS	(1) 10FLYKITB - Request-to-Exit sensor (pg 18)
	(1) 10PS12-24 - UL, filtered and regulated power supply (pg 109)
	(1) 10ACPBSS1 - Push-to-Exit button (pg 78)
	(1) 10BR3X - programmable 3-relay logic module (pg 54)
	(1) 10MAGLOCK3ULDS - 600 lb MAGLOCK (pg 92)



## **EMERGENCY ADD-ON KIT**

FOR SINGLE-OCCUPANCY RESTROOMS



#### **For Outside Signaling**

"ASSISTANCE REQUIRED" signal (LED + adjustable sounder)

#### **Combined Unit for Ease of Installation**

"PUSH FOR EMERGENCY ASSISTANCE" button + indicator (LED + selectable sounder)

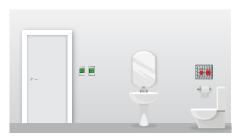
#### **Signage Available in English and French**

Double-sided signage offers French and English emergency notice

#### **Code Compliant**

Ontario Regulation 368 / 13 compliant





#### **TECHNICAL SPECIFICATIONS**

10ARS		
Lamp Voltage Rating	28 VAC/VDC	
Sounder Voltage Rating	16 – 25 VAC/VDC	
Sounder Current Rating	15 mA	
Lamps	Miniature bayonet type (#313)	
Mounting	Fits standard single-gang	
Sounder/Lamp Terminal	2 pigtail wires (each)	
Materials	Stainless steel and PC	
<b>Dimensions</b> Single-gang faceplate White Lens (B-31695)	2 <sup>3</sup> / <sub>4</sub> " (W) × 4 <sup>1</sup> / <sub>2</sub> " (H) 2 <sup>1</sup> / <sub>4</sub> " (W) × 4" (H) × 3 <sup>1</sup> / <sub>8</sub> " (D)	
10EBUTTONCOMBO		
Voltage	12 – 24 VAC/VDC ±10%	
Indication	Audible buzzer (selectable on/off) and visual LED	
Text Inserts	10	
Button	E-stop button Push on / Pull off	
Materials	Stainless steel and PC	
Accessory	Rubber weather gasket included	
Certifications	FCC	
Dimensions	4 ½" (W) × 4 ½" (H)	
70.5675		
Material	Polystyrene	
Dimensions	12" (W) x 5 ½" (H)	
Language	Double-sided, French/English	

10EMERGENCYKIT	Emergency Add-On Kit includes:
	(1) 70.5675, (1) 10EBUTTONCOMBO, and (1) 10ARS
10ARS	"Assistance Required" Signal
70.5675	Emergency signage
10EBUTTONCOMBO	"Push for Emergency Assistance" Double Gang Button + Indicator
10RESTROOMKIT	Restroom Kit includes: (1) 10PTLBUTTON, (1) 10LEDSOUNDER, (1) 10SWITCH1084, and (1) 10BR3X
1012VAC	12 VAC (20 VA) transformer
1024VAC	24 VAC (40 VA) transformer



## **RESTROOM KIT**

FOR SINGLE-OCCUPANCY, NORMALLY LOCKED/UNLOCKED RESTROOMS



**Door Position Reset For Proper Functionality** 

Door position switch ensures proper positioning of the door before

#### **Advanced Logic with Restroom Functionality**

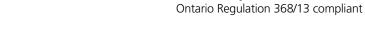
BR3-X (13-function advanced logic module) controls locking and sequencing functionality

#### **Highly Visible and Audible**

Occupied Indicator with LED

#### **Visual Lock Confirmation**

Push-to-Lock Button with LED







#### **TECHNICAL SPECIFICATIONS**

10BR3X	
See page 54	
10LEDSOUNDER	
Voltage	12 – 24 VAC/VDC ±10%
Indication	Audible buzzer (selectable on/off) and visual LED
Text Inserts	10
Material	Stainless steel
Certifications	FCC
10PTLBUTTON	
Switch	SPST
Voltage Max.	125 / 250 VAC
Current Max.	10 A
Power Max.	373 W
<b>Electrical Configuration</b>	SPDT
High-volt Bulb	
Input voltage	15 – 24 VAC/VDC
Current	0.06 A
Low-volt Bulb	42 44 VA CA /DC
Input voltage Current	12 – 14 VAC/VDC 0 19 A
Dimensions	2 ½13" (W) × 4 ½" (H) × ¾4" (D)
10SWITCH1084	2 /13 (VV) ~ 4 /2 (11) ~ /4 (D)
	2014 51 75
Switching Voltage Max.	30 VAC/VDC
Switching Current Max.	0.25 A
Power Max.	3.0 W
Electrical Configuration	SPDT
Loop Type	Open or closed
Gap Distance Max.	2"

#### **PRODUCT SERIES**

resetting the system

**Code Compliant** 

10RESTROOMKIT	Restroom Kit includes: (1) 10PTLBUTTON (1) 10LEDSOUNDER (1) 10SWITCH1084 (1) 10BR3X
10BR3X	3-relay logic module
10LEDSOUNDER	Occupied indicator
10PTLBUTTON	"Push To Lock" button
10EMERGENCYKIT	Emergency Add-On Kit includes: (1) 70.5675 (1) 10EBUTTONCOMBO (1) 10ARS
10MAGLOCK1UL	1200 lb, single
10MAGLOCK3UL	600 lb, single
10STRIKECU	UNIVERSAL CYLINDRICAL electric strike
10STRIKERE	RIM EXIT electric strike
10SWITCH1084	Door position switch
10PS12-24	UL / ULC Listed power supply
1012VAC	12 VAC (20 VA) transformer
1024VAC	24 VAC (40 VA) transformer



## **MAGIC SWITCH RESTROOM KITS**

TOUCHLESS RESTROOM KITS FOR SINGLE-OCCUPANCY, NORMALLY LOCKED/UNLOCKED RESTROOMS

#### **Hands-free Operation**

BEA's MS42 microwave actuator reduces touchpoints and provides reliable activation and locking functionality for users

#### **Convenient, One-Box Solutions**

Pre-configured kits make ordering and stocking a breeze





#### **Ease of Installation**

Pre-wired BR3-X comes integrated in the UL294-listed power supply cabinet for quick installation

WAVE TO

#### **Fast Setup and Finetuning**

Convenient remote control programming eliminates manual sensor adjustments, saving time and streamlining installation





#### **TECHNICAL SPECIFICATIONS**

POWER SUPPLY EI	NCLOSURE
Agency listings	UL294, cUL, CSFM, MEA, NFPA 101
Input	115VAC, 60Hz, 0.6A.
Output	12VDC or 24VDC
•	1.75A continuous
Supervision	AC fail supervision
	Dry trigger output
Fire alarm interface	Dry trigger input
Visual indicators	AC input and DC output LED indicators
<b>Enclosure dimensions</b>	8.5" × 7.5" × 3.5"
	(215.9mm × 190.5mm × 88.9mm)
LOGIC MODULE	
Supply voltage	12 – 24 VAC/VDC ±10%
<b>Current consumption</b>	30 – 130 mA (DRY output)
Temperature rating	-15 – 150 °F (-26 – 150 °C)
	If powered by AC voltage and using WET output to convert to DC voltage and current draw of device is greater than 0.9 A, the upper temperature range is 130 °F (54 °C).
Input	
Input 1, 2, 3, 4	DRY contact
WET input	5-24 VAC/VDC ±10%
Contact rating	
relay 1 (DRY)	3 A @ 24 VAC or 30 VDC
relay 1 (WET)	1 A
relay 2 relay 3	3 A @ 24 VAC or 30 VDC 1 A @ 24 VAC or 30 VDC
Dimensions	
	5.2" x 2.2" x 1" (133 mm x 55 mm x 25 mm)
Housing	ABS - white translucent

#### **PRODUCT SERIES**

	10MSRR-S	Touchless restroom kit, without power supply - single gang
	10MSRR-SGPS	Touchless restroom kit, with power supply - single gang
	10MSRR-D	Touchless restroom kit, without power supply - double gang
	10MSRR-DGPS	Touchless restroom kit, without power supply - double gang

#### **MS42**

Technology	microwave motion sensor
Radiated frequency	24.150 GHz
Detection range	4 – 24" (adjustable)
Supply voltage*	12 – 24 VAC ±10% 12 – 24 VDC +30% / -10%
Power consumption	< 1.5W
Output* max. voltage max. current	Electronic relay (galvanic isolation - polarity free) 42 VDC / 30 VAC 100 mA
Temperature range	-20 − 55 °C
IP rating	IP55
Certification	EMC: 2004/108/EC FCC: G9B-210161 IC: 4680A-210161
	FCC: G9B-210161

 $<sup>^{*}</sup>$  External electrical sources must be within specified voltages (max 15 W) and ensure double insulation from primary voltages.

DOOR POSITION SY	WITCH
Gap distance	0.43"
Loop	open
Reed form	N.C.
Max. contact rating	3 W
Max. initial contact resistance	100 mΩ
Max. switching voltage	30 VAC/VDC
Max. switching current	0.2 A
Color	white
Leads length	12", 22 AWG
Contact size	1.1" (L) × 0.37" (W) × 0.19" (H)

### **BOLLARDS**

MOUNTING POST FOR PUSH PLATES

#### **Enhances Accessibility**

Compatible with most push plate shapes and sizes, bollards provide a mounting surface for ADA-compliant actuators

#### **Versatile Mounting**

Can be mounted either on existing concrete or in newly poured concrete





#### **TECHNICAL SPECIFICATIONS**

Dimensions (with cap)	41 ½" (H) × 6 ¼" (W) × 4 ¼" (D)
Materials	
Post	Powder-coated, carbon steel (exterior + partial interior)
Cap	UV-resistant ABS
Bracket	Stainless steel
Push Plate	4 ½" square, 4 ¾" square (including PANTHER)
Compatibility*	Dual-vestibule, 4 ½" round
Weight	35 lb
Color	Black, bronze, or silver
Hardware	
Post	$\frac{1}{2}$ " × 13 UNC × 1" socket-head bolts (4) – $\frac{5}{16}$ " hex
Сар	$\#6 \times 3\%$ " sheet metal screws (3) and $\#6$ finishing washers (3)
Bracket	3" expansion anchors (4), lock washers (4), and nuts (4)

<sup>\* &</sup>quot;Without hole" versions will accommodate 6" square and 6" round PANTHER plates as well as surface-mount card readers, keypads, or other surface-mount devices.



#### **Variety Of Styles Available**

Available in silver, bronze, and black and with or without hole

#### **Wireless Compatibility**

UV-resistant ABS plastic cap allows for transmission when using wireless transmitters





10BOLLARDBLK*	Mounting post for stainless steel push plates (black)	
10BOLLARDSLV*	Mounting post for stainless steel push plates (silver)	
10BOLLARDBRZ*	Mounting post for stainless steel push plates (bronze)	
10BOLLARDBLKWOH*	Mounting post without precut mounting holes (black)	
10BOLLARDSLVWOH*	Mounting post without precut mounting holes (silver)	
10BOLLARDBRZWOH*	Mounting post without precut mounting holes (bronze)	
50.0073	Plastic, transmitter shelf for BOLLARD	
50.5320	BOLLARD hardware pack includes: Larger compression bolts Undercut screws Washers	
70.0195	BOLLARD cap	
70.5022	U-shaped BOLLARD mounting bracket (bracket only), larger screw holes	

 $<sup>^{\</sup>star} \ \, \text{All bollards include: 50.0073, 50.5320, 70.0195, and 75.5022}.$ 

## **MOUNTING BOX EBA**

MOUNTING BOX WITH EASY BATTERY ACCESS

#### **Unique Two-Piece Design**

- Ensures easy installation
- Allows for quick battery replacement compared to standard mounting boxes
- Eliminates the need to disassemble the push plate from the back
- Improves wireless transmitter accessibility compared to small change-out compartments



#### **Convenient Access**

Locking screw secures box to mounting plate

#### **Compatibility**

Designed for BEA's most popular push plate design









#### **TECHNICAL SPECIFICATIONS**

Dimensions	5 $^{13}\!/_{32}$ " (W) $\times$ 5 $^{13}\!/_{32}$ " (H) $\times$ 1 $^{31}\!/_{32}$ " (D)	
Materials		
Box	ABS	
Locking Screw	Stainless steel	

10BOX475SQSMEBA	Mounting box with easy battery access	
10PBS	4 ¾" square push plate, "Push To Open" text only	
10PBS1	4 ¾" square push plate, "Push To Open" text and accessibility logo	
10PBSLL	4 <sup>3</sup> / <sub>4</sub> " square push plate, accessibility logo only	
10PBS10	4 ¾" square push plate, plain	
10PBSE	4 ¾" square push plate, "Push To Exit" text only	
10PBS1B	4 ¾" square push plate, white on blue "Push To Open" text and accessibility logo	
10PBS1SB	4 ¾" square push plate, blue on satin brass "Push To Open" text and accessibility logo	
10TD900PB	Hardwired transmitter	
10TD433PB3V	Wired transmitter, with flag connectors, 1-button (3-volt battery)	
10TD433PB9V	Wired transmitter, with flag connectors, 1-button (9-volt battery)	
10WRSQ475	PBS series weather ring	

## **INSTALLATION ACCESSORIES**

BEA'S LINE OF SUPPLEMENTAL DOOR ACCESSORIES

10TECHKIT	Includes BEA Spotfinder, BEA Universal Remote Control, Door Pressure Gauge, and a BEA Screwdriver	
10DOORSWITCH	On / Off / Hold Open switch	
10DPG50	Door pressure gauge, 50 lbs	
10REL12VAC	DPDT isolation relay 12 VAC only	
10REL12VDC	DPDT isolation relay 12 VDC only	
10REL24V	DPDT isolation relay 24 VAC only	
10REL24VDC	DPDT isolation relay 24 VDC only	
10REMOTE	Universal remote control for sensor setup	
10SPOTFINDER	Active-infrared-spot finder	
10SWITCH75	Magnetic, door position switch ½" gap, NO / NC, SPDT 0.44" diameter, flush mount	
10SWITCH1076	Magnetic, door position switch <sup>3</sup> /4 to 2" gap, NO / NC, SPDT 0.875" diameter, flush mount	
10SWITCH1084	Magnetic, door position switch 2" gap, NO, SPDT surface mount with terminal strip	
10SWITCH1277	Magnetic, door position switch ½" gap, NO / NC, SPDT 0.375" diameter, flush mount	
30.5580	Magnetic, door position switch ¾" gap, NO, SPST 0.375" diameter, flush mount	
50.5283	Magnetic, door position switch <sup>3</sup> / <sub>4</sub> " gap, NO, SPST, flush mount	





## **JAMB CAM**

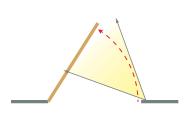
JAMB-MOUNTED, COLOR VIDEO CAMERA

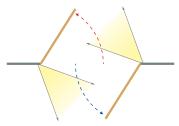
#### **High Resolution Video**

Full-color video with resolution of 480 by 720 (480p)

#### **Visual Coverage of Door Threshold**

Wide angle lens for complete view of door and traffic flow





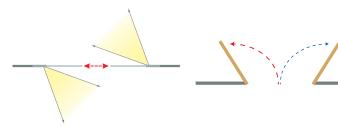
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#### **Easy to Install**

Integrated voltage regulator for installation convenience

#### **Low-Profile Camera**

Low-profile design minimizes accidental damage from shopping carts and other errant objects



#### **TECHNICAL SPECIFICATIONS**

	5.5 25.1/25 400/
Supply Voltage	6.6 – 36 VDC; ±10%
	6.0 – 28 VAC; ±10%
Operating Temperatures	-22 – 140 °F (relative humidity 95% max)
3 - 1	(-30 − 60 °C)
Video Output	1.0 (Vp-p) / 75 Ω
video Output	1.0 (νρ-ρ) / / 3.12
Image Sensor	CMOS
<b>Horizontal Resolution</b>	480 TVL
NTSC Output	720 (H) × 480 (W)
Sync System	Inter-Sync
Frame Rate	30 fps
Minimum Illumination	0.01 LUX
AE Control	Auto
Gain Control	Auto
<b>Electronic Shutter</b>	1 s ~ 1/10,000 s
S/N Ratio	> 50 dB
AWB	Auto
Dimensions	1 ¾" (W) × 3" (H) × ¾" (D)

10JAMBCAM	Jamb-mounted, color video camera
10IXIODT1V	IXIO-DT1 with integrated video
20.2006	14' camera harness and power supply



## **POWER SUPPLIES AND TRANSFORMERS**

Can be used with select BEA products that require additional power

#### **TECHNICAL SPECIFICATIONS**

Output (Barrer Crossly)		
Output (Power Supply) VDC Switch Position Max. Stand-by Load DC Max. Alarm Load DC Battery (optional)	12 VDC SW1 open 1.75 A 1.75 A 12 VDC	24 VDC SW1 closed 1.75 A 1.75 A 24 VDC
Output (Stand-by) VDC 4 Hr. of Stand-by and 5 Minutes of Alarm	12 VDC / 7 AH battery Stand-by = 1.25 A	12 VDC / 7 AH battery Alarm = 1.25 A
Input	115 VAC / 60 Hz, 0.6 amp Fire alarm panel or access control trigger input	
Supervision	AC fail supervision (form "C" contacts) AC input and DC output LED indicators Short circuit and thermal overload protection Unit includes: power supply, transformer and enclosure	
Visual Indicators	AC input and DC output LED indicators	
<b>Enclosure Dimensions</b>	7 ½" (W) × 8 ½" (H) × 3 ½" (D)	
Norm Conformity	No.205-M1983, Signal E	isted - CSA Standard C22 quipment, CSFM (Californi oved, MEA - NYC Dept. of A 101 (Life Safety)

10PS12-24D		
Battery Backup	Maximum charge current: 400mA Automatic switch over to stand-by battery when AC fails	
Output (Power Supply)		
VDC	12 VDC	24 VDC
Switch Position	SW1 open	SW1 closed
Max. Stand-by Load DC	1.75 A	1.75 A
Max. Alarm Load DC	1.75 A	1.75 A
Battery (optional)	12 VDC	24 VDC
Output (Stand-by)		
VDC	12 VDC / 7 AH Battery	12 VDC / 7 AH Battery
4 Hr. of Stand-by and	Stand-by = $1.25 A$	Alarm = 1.25 A
5 Minutes of Alarm		
Battery not included		
Output	Selectable 12 VDC or 24 VI Class 2 Rated power limi 1.75 A continuous supply VDC	
	Filtered and electronically Short circuit and thermal	
Input	115 VAC / 60 Hz, 0.6 A	
Supervision	AC fail supervision (form	"C" contacts)
	Dry trigger output (form	"C" contacts)
Fire Alarm Interface	Dry trigger input	
Visual Indicators	AC input and DC output LED indicators	
<b>Enclosure Dimensions</b>	13 ½" (W) × 13" (H) × 3 ¼" (D)	
Norm Conformity	UL Listed for Access Con Listed - CSA Standard C2	trol Systems (UL294), ULC 22.2





10PS12-24D









10PSMDR2024

	חכי	חוו	
	DC		
		VΚ	

TOLOVICOL		
Input	24 VAC or 24 VDC	
Output	5 VDC (VR1TM5) or 12 VDC output. Filtered and electronically regulated output Built-in overload protection	
Visual Indicators	Power LED indicator	
Features	Modular connector/cable assembly facilitates eas of wiring Compact design allows for integration in a wide range of camera housings	
Enclosure Dimensions VR5T / VR5BT All Other Units	3 3/8" (W) × 1 1/8" (H) × 2 1/2" (D) 1 5/8" (W) × 1" (H) × 2 3/6" (D)	
Degree of Protection	CE	

#### 10PSMDR2024

TOT SIVIDINZUZT	
Input	
Voltage Range	85 – 264 VAC, 120 – 370 VDC
Frequency Range	47 – 63 Hz
Output	
DC Voltage	24 V
Rated Current	1A
Rated Power	24 W
<b>Enclosure Dimensions</b>	7/8" (W) × 3 1/2" (H) × 4" (D)

10PS12-24	UL / ULC Listed power supply
10PS12-24D	UL / ULC Listed power supply with backup circuit (1.75 A) battery NOT included
10PSMDR2024	DIN rail power supply, 100 – 240 VAC / 24 VDC
10PSVR5T	Voltage regulator, 24 VAC / 24 VDC
1012VAC	12 VAC (20 VA) transformer
1024VAC	24 VAC (40 VA) transformer
10PSST242	Plug-in power supply







All over the world, people pass through automatic doors, gates and other transportation equipment every day. BEA offers a wide variety of convenient, safe and reliable solutions for on- and off-door applications. No matter the environment, sensing solutions can reduce energy costs, protect equipment and increase accessibility.

us.BEAsensors.com/en/Where-To-Find-Us/



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**WIRELESS, 900 MHZ FAMILY** 



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