

# Innovative Access Controls

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# Product Selection Guide

## Photoeyes

Model	Operating Range	Output	Power	Monitoring Method	Housing	Rating	Connection	Sensitivity Adjustment	Features
<b>Thru Beam</b>									
<b>IRB-MON</b> 	Up to 115 ft. (35m)	Relay Pulse	6-35 VDC 12-24 VAC	2 wire pulse NC 10K	Polycarbonate	NEMA 4X	TX - 2 terminals RX - 5 terminals	Potentiometer - dial	UL325 monitored 
<b>IRB-325</b> 	Up to 65 ft. (20m)	Relay	12-24 VDC 24 VAC	NC	Polycarbonate	NEMA 4X	TX - 2 terminals RX - 5 terminals	Jumper - high, med, low	UL325 monitored 
<b>IRB-4X</b> 	Up to 115 ft. (35m)	Relay	12-24 VDC 24 VAC	—	Polycarbonate	NEMA 4X	TX - 2 terminals RX - 5 terminals	Potentiometer - dial	—
<b>IRB-EXP</b> 	Up to 115 ft. (35m)	Relay	12-24 VDC 24 VAC	—	Aluminum	Class 1	TX - 2 terminals RX - 5 terminals	Potentiometer - dial	Explosion-proof
<b>PC-3</b> 	Up to 30 ft. (9m)	Relay	12-24 VDC 24 VAC	—	PVC	IP50	TX - 2 wire RX - 5 wire	—	—
<b>BPE-50</b> 	Up to 50 ft. (15m)	Relay	12-24 VDC 24 VAC	—	Polycarbonate	IP66	TX - 2 terminals RX - 5 terminals	Jumper - high, low	Battery powered TX- 2-3.6 VDC (2, AA lithium batteries)
<b>Retroreflective</b>									
<b>IRB-RET</b> 	Up to 60 ft. (18m)	Relay Pulse	6-40 VDC 12-24 VAC	2 wire pulse 4 wire pulse NC 10K	ABS	NEMA 4X	9 terminals	Potentiometer - dial	UL325 monitored 
<b>NIR-50-325</b> 	Up to 50 ft. (15m)	Relay	12-30 VDC 24-30 VAC	NC 10K	ABS	IP66	5 wire	Potentiometer - dial	UL325 monitored 
<b>NIR</b> 	Up to 30 ft. (9m)	Relay	12-240 VDC 24-240 VAC	—	ABS	IP66	5 wire	Potentiometer - dial	—
<b>NIR-50</b> 	Up to 50 ft. (15m)	Relay	12-240 VDC 24-240 VAC	—	ABS	IP66	5 wire	Potentiometer - dial	—

## Vehicle Loop Detectors

Model	Output	Power	Channel	Housing	Connection	Detect-on-Stop™	ULTRAMETER™ Sensitivity Display	Detection Mode	Features
MVP D-TEK 	Dual relay	Multi-voltage 12 VDC - 240 VAC	Single	Aluminum	11-pin	—	—	Presence and Motion	Pulse on entry/exit
ULT-MVP 	Dual relay	Multi-voltage 12 VDC - 240 VAC	Single	ABS	11-pin	Yes	Yes	Presence and Motion	Pulse on entry/exit
ULT-MVP-2 	Dual relay	Multi-voltage 12 VDC - 240 VAC	Dual	ABS	11-pin	Yes	Yes	Presence and Motion	Pulse on entry A/B logic
ULT-DIN 	Dual relay	12-24 VDC 24 VAC	Single	ABS	DIN rail screw terminal	Yes	Yes	Presence and Motion	Pulse on entry
ULT-PLG 	Discrete	12-24 VDC	Single	ABS	10-pin female	Yes	Yes	Presence and Motion	Pulse on entry/exit
ULTRA V-2 	Discrete	12-24 VDC	Single	ABS	10-pin female	—	Yes	Presence and Motion	Pulse on entry/exit
ULTRA II 	Relay	12-30 VDC 24 VAC	Single	ABS	7 position screw terminal	—	Yes	Presence and Motion	Pulse on entry
LP D-TEK 	Dual relay	12-24 VDC/AC	Single	Aluminum	11-pin	—	—	Presence and Motion	Pulse on entry/exit

## Loops

Model	Detection Range	Size	Housing	Connection	Mounting	Features
PR-LOOP 	Dependent on loop size	2'x6', 4'x6', 4'x8', 4'x10', 6'x10' and 8'x12' with a 50 ft. lead	TPE tubing	2 wire (0.26" dia.)	Below ground	Built-in lightning protection
SP-24 	Up to 30"	23.75" x 23.75" x 1" with a 50 ft. lead	Polypropylene	2 wire (0.26" dia.)	Above ground (between guide rails)	Designed for carwash

## Loop-Less Magnetostrictive Vehicle Detector

Model	Operating Range	Output	Power	Channel	Housing	Rating	Connection	Detect-on-Stop™	ULTRAMETER™ Sensitivity Display	Installation	Detection Material	Mounting	Detection Mode	Features
Control Unit (required to program sensors)														
CS303-C-1 	—	Relay and discrete	12-30 VDC 24 VAC	Single	ABS	IP30	11 position screw terminal	Yes	Yes	In operator	—	Above ground	Presence and Motion	Pulse on entry/exit
Sensor Options														
CS303-FP 	5 ft. radius (1.5m) 10 ft. dia. (3m)	Discrete	12-30 VDC	Single	Polyamide	IP69K	5 wire	Yes	—	Single saw cut	Ferrous metal	Below ground	Presence and Motion	Retains programmed settings
CS303-DB 	5 ft. radius (1.5m) 10 ft. dia. (3m)	Discrete	12-30 VDC	Single	PVC	IP69K	5 wire	Yes	—	Core drill, Clamp	Ferrous metal	Above or below ground	Presence and Motion	Retains programmed settings
Accessory Unit														
CS303-L 	20 ft. (6m) or more with use of multiple FP or DBs	Dual relay	12-30 VDC 24 VAC	Dual	ABS	IP30	11-pin	Yes	—	In operator	—	Above ground	Presence and Motion	Provides extended detection, A/B logic and more

## Loop-Less Ultrasonic Vehicle Detector

USVD-4X 	5 ft. (1.5m)	Dual relay	12-24 VDC/AC	Single	ABS	NEMA 4X	10 position screw terminal	—	—	Post, Order box	Vehicles and People	Above ground	Presence	Pulse on entry/exit
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## Vehicle Motion Detectors

Model	Operating Range	Output	Power	Sensitivity Adjustment	Connection	Housing	Features
CS101 	12 ft. (~4m) @ 5mph min. speed	Dual relay	9-41 VDC 6-29 VAC	Potentiometer - dial	11-pin	Control unit: polycarbonate Probe: PVC	Adjustable output time
CS202 	12 ft. (~4m) @ 5mph min. speed	Relay	9-41 VDC 6-29 VAC	—	5 wire	PVC	Single piece detector
VMD202 	12 ft. (~4m) @ 5mph min. speed	Relay	9-41 VDC 6-29 VAC	Optional remote	5 wire	Probe: PVC Optional remote: polycarbonate	Single piece detector

## Wireless Edge Link

Model	Operating Range	Output	Power	Monitoring Method	Housing	Rating	Connection	Operating Frequency	Features
 <p>WEL-200</p>	Up to 200 ft. (61m)	Dual relay Dual pulse	TX - 3-3.6 VDC (2, AA lithium batteries) RX - 12-24 VDC/AC	4 wire pulse NC 10K	ABS	NEMA 4X	TX - 2 terminals (connect up to 4 TX) RX - 12 terminals	915 MHz	UL325 monitored 

## Keypads/Card Readers

Model	Output	Power	Users	Housing	Rating	Connection	Mounting	Card Reader	Features
 <p>CR-2000</p>	Weigand and relay	9-25 VDC	2,000 users via card/code	Stainless steel	IP67	Wire harness	Plate	Yes	Momentary/ toggle output
 <p>PRX-320</p>	Relay	12 VDC	2,000 users via card 8 users via code	PVC	IP67	Wire harness	Plate	Yes	Momentary/ toggle output
 <p>KPX-100</p>	Dual relay	12-24 VDC/AC	100 users via code on relay 1 10 users via code on relay 2	Stainless steel	IP66	Terminal block	Housing	—	Momentary/ toggle output

## Timers

Model	Output	Power	Programmable Events	Housing	Rating	Connection	Mounting	Battery Backup	Features
 <p>DTM-9</p>	Relay	12 VDC 24 VDC/AC 120 VAC	6	Polycarbonate	IP60	Isolated screw terminal strip with 5 connections	DIN rail and flush mount	Yes	Lock on/off
 <p>ETM-17</p>	Relay	12 VDC 24 VDC/AC	17	Polycarbonate	IP60	Blade terminal with 5 connections	Screw mount	Yes	Lock on/off

## Industrial Motion Sensor

Model	Operating Range	Output	Power	Housing	Rating	Connection	Mounting	Detection Material	Features
 <p>HAWK 2</p>	3-33 ft. (1-10m)	Relay	12-24 VDC/AC	ABS	IP65	6 ft. (2m) cable	Overhead, Wall	Vehicles and People	Directional detection

# Company Overview

## ABOUT US

EMX Industries, Inc. is a leading manufacturer of sensors and controls used in a wide range of applications. For over 30 years, we have worked with the gate and door operator, access control, parking and security markets. Our sensors are used to detect the presence and motion of vehicles as well as people.

EMX offers a variety of vehicle detection technologies, including:

- Inductive
- Ultrasonic
- Magnetic
- Magneto-resistive
- Infrared
- Microwave



## OUR PHILOSOPHY

EMX remains focused on safety as an active participant in the DASMA committee on UL325 specifications. Our strict adherence to the ISO 9001 quality control system ensures the highest performing products.

Engineered and manufactured in Cleveland, Ohio, EMX relies on local infrastructure and talent to design, manufacture and sell cost-effective solutions to unique access control applications.

The EMX name says it all...  
Engineered to Manage your X-factor

