



# 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>									
IRB-MON KIT 	Up to 115 ft. (35 m)	Relay & Pulse	6-35 VDC 12-24 VAC	2 wire pulse NC 10K	Polycarbonate	NEMA 4X	TX - 2 terminals RX - 5 terminals	Potentiometer	UL325 monitored 
IRB-325 KIT 	Up to 65 ft. (20 m)	Relay	12-24 VDC/AC	NC	Polycarbonate	NEMA 4X	TX - 2 terminals RX - 5 terminals	Jumper	UL325 monitored 
IRB-4X KIT 	Up to 115 ft. (35 m)	Relay	12-24 VDC/AC	—	Polycarbonate	NEMA 4X	TX - 2 terminals RX - 5 terminals	Potentiometer	Explosion-proof, aluminum housing available (IRB-EXP)
PC-3 	Up to 30 ft. (9 m)	Relay	12-24 VDC/AC	—	PVC	IP50	TX - 2 wire RX - 5 wire	—	—
BPE-50 	Up to 50 ft. (15 m)	Relay	12-24 VDC/AC	—	Polycarbonate	IP66	TX - 2 terminals RX - 5 terminals	Jumper	Battery powered TX- 2-3.6 VDC (2, AA lithium batteries)
<b>Retroreflective</b>									
IRB-RET KIT 	Up to 60 ft. (18 m)	Relay & Pulse	6-40 VDC 12-24 VAC	2 wire pulse 4 wire pulse NC 10K	ABS	NEMA 4X	9 terminals	Potentiometer	UL325 monitored 
NIR-50-325 KIT 	Up to 50 ft. (15 m)	Relay	12-30 VDC 24-30 VAC	NC 10K	ABS	IP66	5 wire	Potentiometer	UL325 monitored 
NIR KIT 	Up to 30 ft. (9 m)	Relay	12-240 VDC 24-240 VAC	—	ABS	IP66	5 wire	Potentiometer	—
NIR-50 KIT 	Up to 50 ft. (15 m)	Relay	12-240 VDC 24-240 VAC	—	ABS	IP66	5 wire	Potentiometer	—



## Accessory Unit

Model	Compatibility	Housing	Size	Weight	Features
PHOTOEYE VAULT 	IRB-RET, IRB-MON, IRB-4X *photoeye sold separately	120" 11-gauge steel post 1/8" steel base plate	4.25" x 4.25" x 24.25" post 8x8" base plate	16 lbs.	Tamper-proof design that accommodates photoeye hood





## 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 & Motion	Pulse on entry/exit
ULT-MVP 	Dual relay	Multi-voltage 12 VDC - 240 VAC	Single	ABS	11-pin	Yes	Yes	Presence & Motion	Pulse on entry/exit
ULT-MVP-2 	Dual relay	Multi-voltage 12 VDC - 240 VAC	Dual	ABS	11-pin	Yes	Yes	Presence & Motion	Pulse on entry A/B logic
ULT-DIN 	Dual relay	12-24 VDC/AC	Single	ABS	DIN rail screw terminal	Yes	Yes	Presence & Motion	Pulse on entry
ULT-PLG 	Discrete	12-24 VDC	Single	ABS	10-pin female	Yes	Yes	Presence & Motion	Pulse on entry/exit
ULT-II 	Relay	12-30 VDC 24 VAC	Single	ABS	7 position screw terminal	—	Yes	Presence & Motion	Pulse on entry
LP D-TEK 	Dual relay	12-24 VDC/AC	Single	Aluminum	11-pin	—	—	Presence & 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 Magnetoiresistive 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)														
LRS-C1 	—	Relay & discrete	12-30 VDC 24 VAC	Single	ABS	IP30	11 position screw terminal	Yes	Yes	In operator	—	Above ground	Presence & Motion	Pulse on entry/exit
Sensor Options														
LRS-FP 	5 ft. radius (1.5 m) 10 ft. dia. (3 m)	Discrete	12-30 VDC	Single	Polyurethane	IP69K	5 wire	Yes	—	Single saw cut	Ferrous metal	Below ground	Presence & Motion	Retains programmed settings
LRS-DB 	5 ft. radius (1.5 m) 10 ft. dia. (3 m)	Discrete	12-30 VDC	Single	PVC	IP69K	5 wire	Yes	—	Core drill, Clamp	Ferrous metal	Above or below ground	Presence & Motion	Retains programmed settings
Accessory Unit														
LRS-L 	20 ft. (6 m) 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 & Motion	Provides extended detection, A/B logic and more



## Loop-Less Ultrasonic Vehicle Detector

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

Model	Operating Range	Output	Power	Housing	Rating	Connection	Sensitivity Adjustment	Installation	Detection Material	Features
Exit Probes										
CS101 	12 ft. (~4 m) @ 5mph min. speed	Dual relay	9-41 VDC 6-29 VAC	Control unit: Polycarbonate Probe: PVC	—	11-pin	Potentiometer	Control unit: in operator Probe: in/near roadway	Moving vehicles	Adjustable output time
VMD202 	12 ft. (~4 m) @ 5 mph min. speed	Relay	12-41 VDC 8-29 VAC	Probe: PVC Optional remote: Polycarbonate	—	5 wire	Optional remote	In/near roadway	Moving vehicles	Single piece detector
Overhead Microwave										
HAWK 2 	3-33 ft. (1-10 m)	Relay	12-24 VDC/AC	ABS	IP65	6 ft. (2 m) cable	DIP switch & Potentiometer	Wall or ceiling 10-20 ft. (3-6 m)	Moving vehicles	Directional microwave detection
RAVEN 	Customizable detection zone	Dual relay	12-36 VDC 12-28 VAC	Polycarbonate	IP67	26 ft. (8 m) cable	Optional remote	Wall or ceiling 8-23 ft. (2.5-7 m)	Moving vehicles & People	Directional microwave detection
OWL 	Customizable detection zone	Dual relay	12-24 VDC/AC	ABS	IP65	32 ft. (10 m) cable	Required remote	Wall or ceiling 11.5-21.3 ft. (3.5-6.5 m)	Moving vehicles & People	Directional microwave & Infrared presence detection

## Wireless Edge Link

Model	Operating Range	Output	Power	Monitoring Method	Housing	Rating	Connection	Operating Frequency	Features
WEL-200 	Up to 200 ft. (61 m) line of sight	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 


## Wireless Remote

Model	Operating Range	Output	Power	RF Codes	Stored Transmitter Codes	Housing	Connection	Operating Frequency	Features
LR-650 	450 ft. open air	Relay	11-24 VDC/AC	68 billion	15 FIFO	ABS	5 position screw terminal	315 MHz	Optional antenna for extended range up to 1100 ft. (335 m)

## Keypads/Card Readers

Model	Output	Power	Users	Housing	Rating	Connection	Mounting	Card Reader	Features
CR-2000 	Weigand & Relay	9-25 VDC	2,000 users via card/code	Stainless steel	IP67	Wire harness	Plate	Yes	Momentary/toggle output
PRX-320 	Relay	12 VDC	2,000 users via card 8 users via code	PVC	IP67	Wire harness	Plate	Yes	Momentary/toggle output
KPX-100 	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	Through housing	—	Momentary/toggle output

## Timer

Model	Output	Power	Programmable Events	Housing	Rating	Connection	Mounting	Battery Backup	Features
PTM 	Relay	12 VDC/AC 24 VDC/AC 120 VAC	16	ABS	IP20	5 position screw terminal	DIN rail	Yes	90 day blackout protection

# 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
- Magnetoresistive
- 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