EMX INDUSTRIES, INC.

Innovative Access Controls

Product Catalog

MADE IN USA

Scan to Contact Us

5660 Transportation BLVD, Garfield Heights, Ohio 44125

P +1-216-518-9888
   800-426-9912

F +1-216-518-9884

Sales Inquiries: salessupport@emxinc.com

Technical Support: technical@emxinc.com

emxaccesscontrolsensors.com

Photoeyes

Model	Operating Range	Output	Power	Monitoring Method	Housing	Rating	Connection	Sensitivity Adjustment	Features
Thru Beam									
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)
Retroreflective									
NEW **IRB-RET2 KIT**	Up to 60 ft. (18 m)	Relay & Pulse	6-40 VDC 12-24 VAC	2 wire pulse, 4 wire pulse, NC, 10K	Polycarbonate	NEMA 4X	9 Terminals	Potentiometer	UL325 monitored
NIR-50-325 KIT	Up to 50 ft. (15 m)	Relay	6-40 VDC 12-24 VAC	NC 10K	ABS	IP66	5 Wire	Potentiometer	UL325 monitored
NIR KIT	Up to 30 ft. (9 m)	Relay	6-40 VDC 12-24 VAC	—	ABS	IP67	5 Wire	Potentiometer	—
NIR-50 KIT	Up to 50 ft. (15 m)	Relay	6-40 VDC 12-24 VAC	—	ABS	IP68	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 Modes	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 around	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 around (between guide rails)	Designed for carwash

Loop-Less Magnetoresistive Vehicle Detector

Model	Operating Range	Output	Power	Channel	Housing	Rating	Connection	Detect-On-Stop™	ULTRAMETER™ Sensitivity Display	Installation	Detection Material	Mounting	Detection Mode	Features
LRS-FP-KIT	4 ft. radius (1.5 m) 10 ft. dia. (3 m)	Relay	12-30 VDC	Single	PVC	IP69K	10 position screw terminal / 5 wire to probe	Yes	Yes	Single Saw Cut	Ferrous Metal	Below Ground	Presence & Motion	Retains Programmed Settings Through Powerdown
LRS-DB-KIT	5 ft. radius (1.5 m) 10 ft. dia. (3 m)	Relay	12-30 VDC	Single	ABS/PVC	IP69K	10 position screw terminal / 5 wire to probe	Yes	Yes	Core Drill	Ferrous Metal	Above or Below Ground	Presence & Motion	Retains Programmed Settings Through Powerdown
Accessory Unit														
LRS-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 & 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

Vehicle Motion Detectors

Model	Operating Range	Output	Power	Housing	Rating	Connection	Sensitivity Adjustment	Installation	Detection Material	Features
Exit Probes										
CS101	12 ft. (~4 m) @ 5 mph min. speed	Dual relay	12-24 VDC	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 VCD 8-29 VAC	Probe: PVC Optional Remote: Polycarbonate	—	5 Wire	Optional Remote	In/near Roadway	Moving Vehicles	Single Piece Detector
Overhead Microwave										
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 Motion
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

NEW! RFID Keypads & Readers

Model	RFID Type	Operating Frequency	Dimensions	Read Range	Mounting Options	Weight	Power Supply	Operating Temperature	Certifications
P-710-HA	Proximity RFID	125 kHz	6″W x 8.5″H x 1″D (216 mm x 152 mm x 25.4 mm)	Up to 15 inches (378 mm)	Mullions, including metal door and window frames, and other surfaces	20 oz (567g)	+5 -16 VDC, 215 mA typical, 600 mA peak@ 12 VDC	-40° F to 149° F (-40° C to +65° C)	FCC, ICC, CE, C-Tick, UL Standard 2941, IP67
P-500-HA	Proximity RFID	125 kHz	3″W x 4.6″H x 0.4″D (76 mm x 117 mm x 10 mm)	Up to 8 inches (126 mm)	Mullions, including metal door and window frames, and other surfaces	4 oz (113g)	+5 -16 VDC, 35 mA typical, 75 mA peak@ 12 VDC	-40° F to 149° F (-40° C to +65° C)	FCC, ICC, CE, C-Tick, UL Standard 294, IP67
P-300	Proximity RFID	125 kHz	1.7″W x 3.2″H x 0.7″D (43 mm x 81 mm x 18 mm)	Up to 5 inches (126 mm)	Mullions, including metal door and window frames, and other surfaces	3 oz (85g)	+5 -16 VDC, 30 mA typical, 75 mA peak@ 12 VDC	-40° F to 149° F (-40° C to +65° C)	FCC, ICC, CE, C-Tick, UL Standard 294, IP67

NEW! RFID Readers

Model	⭐ Good Patriot - M	⭐⭐ Better Patriot - L	⭐⭐⭐ Best Patriot - E	Short Range Patriot - SR
TX / RX Frequency	902-928 MHz	902-928 MHz	902-928 MHz	902-928 MHz
Max RF Power	30dBm (1 Watt)	30dBm (1 Watt)	30dBm (1 Watt)	25dBm
Average Read Range (site and tag dependent)	18-20 feet	18-25 feet	18-25 feet	Up to 7 feet
Antenna	Circular Polarized 7.5 dBi (Gain)	Linear 10dBi (Gain)	Circular Polarized 7.5 dBi (Gain)	Circular Polarized 4dBi (Gain)
LED Indicator	Yes	Yes	Yes	Yes
Sounder Indicator	Yes	Yes	Yes	Yes
Supply Voltage	9-48VDC	9-48VDC	9-48VDC	9-30 VDC
Included Power Supply	––	110/240AC to 12VDC	110/240AC to 12VDC	––
Included Mounting Bracket	Yes	Yes	Yes	––
Max Current	1.82 A max @ 5vDC, 470mA 5vDC in standby (trigger mode)	1.82 A max @ 5vDC, 470mA 5vDC in standby (trigger mode)	1.82 A max @ 5vDC, 470mA 5vDC in standby (trigger mode)	500mA max @ 5vDC, 200mA 5vDC in standby (trigger mode)
Adjustable read range	Yes	Yes	Yes	Yes
Outputs to Controller	Wiegand	Wiegand, RS-232, Relay Contact OPTIONAL: RS-485 / OSDP	Wiegand, RS-232, Relay Contact, RS-485 / OSDP	Wiegand, RS-232
Communication Options for Reader Configuration	––	OPTIONAL: RJ45 Ethernet Connector OPTIONAL: Wi-Fi	OPTIONAL: RJ45 Ethernet Connector OPTIONAL: Wi-Fi	––
Reader Capability				
Standard Credential Tags	Window Tag, Hang Tag	Window Tag, Hang Tag	Window Tag, Hang Tag	Window Tag, Hang Tag,
Bluetooth Credential Capable	––	Optional	Optional	Optional
Extra Feature	––	Ability to Store up to 500 Authorized Tag Numbers (5 site codes and 100 tags per site) in reader for access control without a door controller		––
Arming Input Capable	Yes	Yes	Yes	Yes
FCC Approval	Part 15	Part 15	Part 15	Part 15
Operational Temperature	-20°C to +70°C	-20°C to +70°C	-20°C to +70°C	-20°C to +70°C
Size	9.45" x 9.45" x 3.82"	9.45" x 9.45" x 3.82"	8.78" x 7.87" x 2.36"	4" x 4" x 1.2"
IP Rated	YES-IP65	YES-IP65	YES-IP65	YES-IP65

RFID Tags

Model	RFID Type	Operating Frequency	Dimensions	Read Range	Mounting Options	Data Retention	Housing
Stealth Tag	EPC Class 1 Gen2, ISO18000-6c	902-928 MHz	5.12 x 1.65 x 0.42 in	18 – 25'	Vertical or Horizontal Orientation. Metal mount with mounting wings (or tabs).	50 Years	Metal tag encased in ABS plastic
Windshield Tags	EPC Class 1 Gen2, ISO18000-6c	902-928 MHz	Custom Windshield Stickers (4.0 × 1.0in) Custom Oval Windshield Stickers (4.5 × 2.5in) Clear/Covert Windshield Sticker (4.75 × 0.625in) Logo Labeled Windshield Sticker (4.0 × 4.0in) Plain White Windshield Sticker (4.0 × 1.0in)	18 – 25'	Adhesive Backed Sticker	50 Years	Adhesive Backed Sticker
Custom Hang Tags	EPC Class 1 Gen2, ISO18000-6c	902-928 MHz	(3.50 × 3.50 × 0.003in) OR (6.0 × 2.125 × 0.04in)	18 – 25'	Hang from vehicle rear-view mirror	50 Years	––
Hang Tags	EPC Class 1 Gen2, ISO18000-6c	902-928 MHz	6.0 × 2.125 × 0.04 in	18 – 25'	Hang from vehicle rear-view mirror	50 Years	––
VIPER	EPC Class 1 Gen2, ISO18000-6c	902-928 MHz	4.75 x 0.042 x 0.625 in	18 – 25'	Vertical or Horizontal Orientation. Clear Adhesive Backed Sticker.	50 Years	Clear, adhesive backed sticker
ISOM Cards	EPC Class 1 Gen2, ISO18000-6c	902-928 MHz	3.370 x 2.125 in	18 – 25'	––	50 Years	––

MADE IN USA

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.

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.