



Recommended External Entrapment Protection Sensors List

The following sensors have been tested with Nice | HySecurity gate operators by an independent laboratory and certified to comply with UL 325 7th Edition. Select sensors from this list for UL compliant gate automation solutions. Contact the sensor manufacturer for specific recommendations for use.

Recommended Sensors					Compatible Control Boards				
	Mfg. Part # or Model	Brand	Nice Hysecurity Part #	Max Range	Smart Touch	Smart DC	SmartCNX/ Smart-Touch 725	1050	Mercury 310
Photo Eyes (Retro-reflective)	E3K-R10K4-NR-1	Omron	MX000999	40 ft	•	•	•		
	NIR-50-325	EMX	-	45 ft	•	•	•	•	•
	IRB-RET	EMX	-	53 ft	•	•	•	•	•
	IRB-RET2	EMX	-	53 ft	•	•	•	•	•
	E-931-S50RRGQ	Seco-Larm	-	46 ft	•	•	•		•
Photo Eyes (Thru-Beam)	Blue Bus Era Photo Eyes	Nice HySecurity	EPMB/A EPMOB/A EPLOB/A EPMAB/A EMBORB/A	45 ft			•	•	•
	OVS-50TNR	Optex	-	33 ft	•	•			
	IRB-MON	EMX	MX3990	65 ft	•	•	•		•
	IRB-MON2*	EMX	MX5792-01	65 ft	•	•	•		•
	E-960-D90GQ	Seco-Larm	-	90 ft	•	•	•		•
Edge Sensors	Sentir Series**	ASO Safety	"AS1502- AS1501-"	-	•	•	•	•	•
	CPT Models	Miller Edge	-	-	•	•	•	•	•
Edge Sensor Converters	Hy2NC (Converts 10K to NC Monitoring)	HySecurity	MX4018	-	•	•			
	GEM103 (Converts 10K to Pulsed Monitoring)	Miller Edge	-	-				•	
Edge Wireless Kits	iGAZE RE Kit	Transmitter Solutions	-	-	•	•	•	•	•
	WEL-200	EMX	-	-	•	•	•	•	•
	RB-G-K10C	Miller Edge	-	-	•	•	•	•	•
Multi-Input Module	The Solution – MIM-62	Miller Edge	-	-	•	•	•		•

*IRB-MON2 photo eyes are pre-bundled with HySecurity SwingSmart DC, SlideSmart DC and SlideDriver operators.

**Sentir Series ASO edge sensors are pre-bundled with HySecurity SlideSmart DC, SlideSmart CNX and SlideDriver operators.

UL 325 Standard:

- The operator shall monitor for the presence of every device at least once during each open and close cycle (32.1.8)
- It shall not be possible to make simple modifications in the field by adding, suppressing or changing, either on the operator or external entrapment protection device(s), to bypass, interfere with, or otherwise defeat the monitoring function. (32.1.10)
- Entrapment zones are now defined for each gate type (4.23, 4.24, 4.29, 4.34)

Slide Gates: To enable fully automatic operation, all SLIDE gate operators will require a minimum of TWO monitored external entrapment protection sensors (one for each direction) to protect entrapment zones in both the open and close direction of travel.

Preferred solution for slide gates: A photo eye for the close direction and a hard-wired edge sensor for the open direction that is mounted to the face of the leading post of the fence behind the gate. (Reach through injuries are the most common hazard associated with automatic sliding gates)

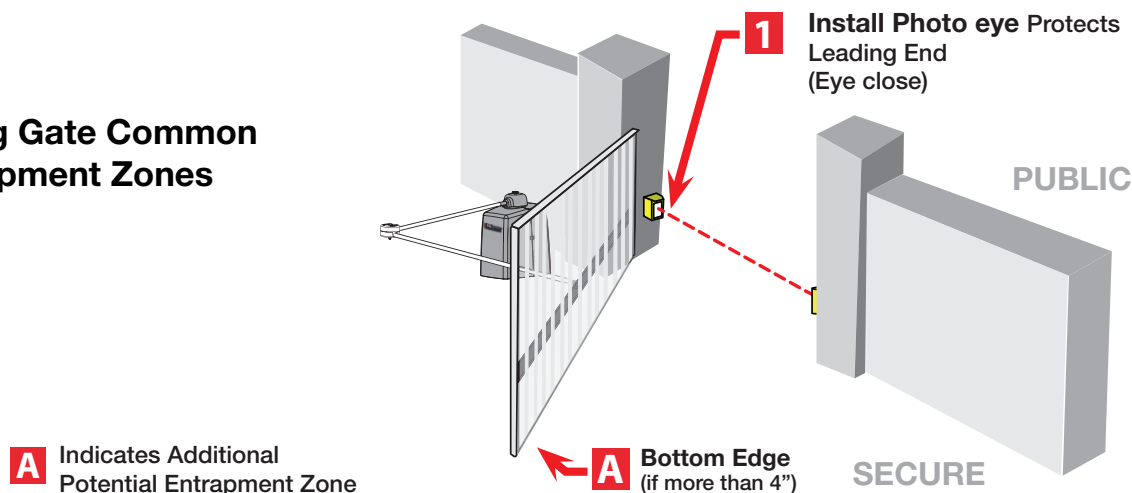
Swing Gates: To enable fully automatic operation, all SWING gate operators will require a minimum of ONE monitored external entrapment protection sensor to protect entrapment zones in either the open or close direction of travel. However, an additional monitored sensor is required if there is a risk of entrapment in both directions of gate travel.

Preferred solution for swing gates: A photo eye for the close direction and/or a hard-wired wraparound edge sensor on the leading edge of the gate, which protects for both directions of gate travel.

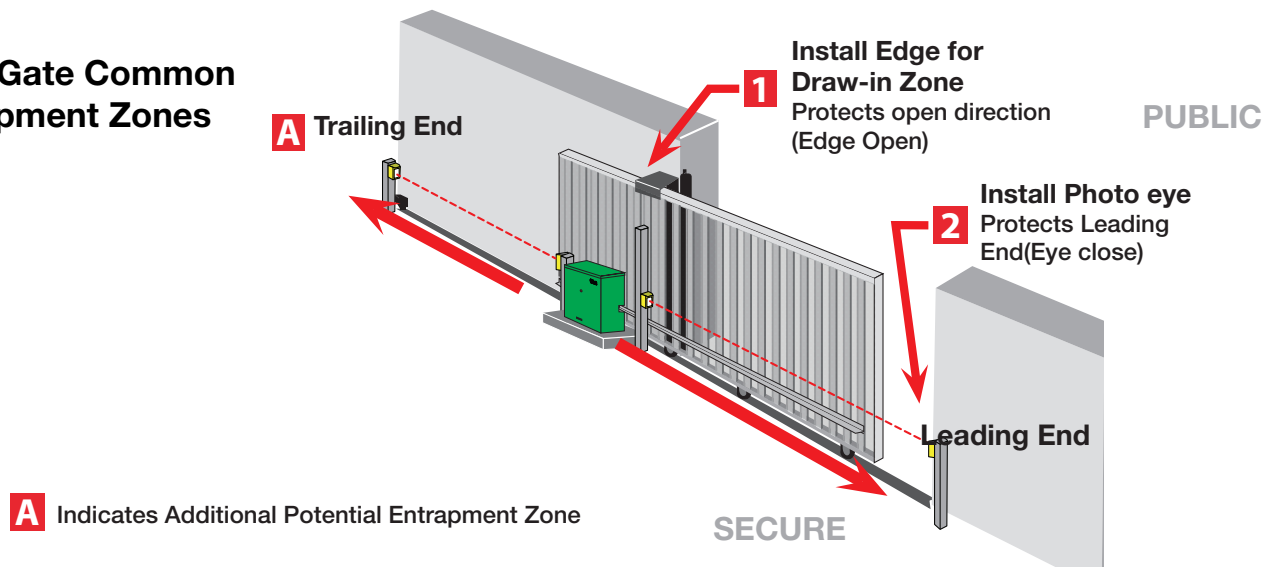
Installers must assess each specific site and install sensors that protect all potential entrapment zones

For more information visit Gate Safety or see latest operator manuals at support.hysecurity.com

Swing Gate Common Entrapment Zones



Slide Gate Common Entrapment Zones



Nice/HySecurity is an industry leader of automated gate and perimeter security solutions. The HySecurity brand provides high-quality, ultra-reliable industrial gate operators and crash-rated, Hostile Vehicle Mitigation (HVM) vehicle barriers designed to secure and protect critical infrastructure and facilities worldwide.