

Door Category

- \square Slidigng
- ☐ Swing
- ✓ industrial
- ☐ Security

Sensor Type

- ✓ Activation
- ✓ Safety
- ☐ Access Control





ACTIVE INFRARED SENSOR

OA-6000

Activation and safety infrared sensor for roll-up door applications.

Unique design enable you to install at lower position when you have pain to climb up to header all the way.

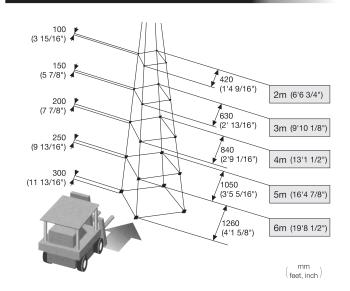
Long range detection area

The OPTEX OA-6000 provides a long range detection area even from high mounting position.

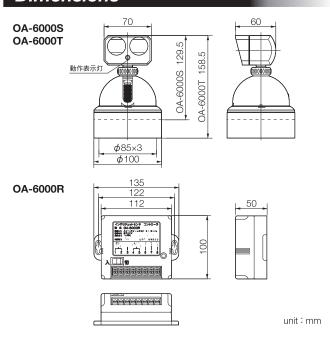
Stable operation

The OPTEX OA-6000 will not activate shutters by too much wide detection area.

Detection area chart



Dimensions



High mounting position with sufficient sensitivity

Stable detection performance at high mounted position.

Flexibility

Detection area can be adjusted 160° vertically and 360° horizontally.

Specifications

Model	OA-6000S OA-6000T		
Detection Range	$2\sim$ 6m		
Detection Method	Active Infrared Reflection Method		
Detection Range	$-80^{\circ} \sim +80^{\circ}$ (Deep / Shallow)		
(vertical)			
Detection Range	360°		
(right & left)			
Power Supply	24V DC		
Power Consumption	< 65mA (24V DC) < 105mA (24V D		
Operation Indicator	LED ON : Stand-by		
	LED OFF : Detection		
	LED Blink : Infinite Detection		
Output	NPN Max. "Form A" relay AC100V		
	40mA/ DC24V DC30V 0.1A Max.		
Relay Hold Time	Approx. 0.5sec.		
Operating Temperature	-20°C to +55°C		
Weight	200g 290g		
Accessories	Mounting Screw × 1set, Operation Manual × 1		
	Mounting Template × 1		

Model	OA-6000R	
Power Supply	100V to 220V AC	
Power Consumption	< 25VA (100V AC) < 32VA (200V AC)	
Operation Indicator	LED ON: Power ON	
	LED OFF : Power OFF	
Output	"Form A" relay AC100V 1A	
	DC30V 0.1A Max.	
Relay Hold Time	Appox. 0.5sec.	
Operating Temperature	-20°C to +55°C	
Weight	240g	
Accessories	Mounting Screw × 1set, Operation Manual × 1	
	Mounting Template × 1	







OPTEX CO.,LTD. (ISO 9001 Certified by LRQA)





The Optex OA-4500 is the new active infrared industrial door sensor standard for use on doors up to a mounting height of 4,5 meter. It was developed as a combination sensor for safety and activation; the active infrared presence detection protects against early closing of the door while the activation area activates the door

This sensor meets market requirements in a variety



Active infrared door sensor

COMBINATION

The Optex OA-4500 is based on active infrared technique, combining activation and safety into one sensor. By using the unique Optex presence detection technique the OA-4500 provides maximum safety around the threshold of an industrial door and offers, at the same time, a large motion detection area for door activation.

SAFETY

The active infrared presence detection of the OA-4500 can be set very accurately and can be moved 6° towards or away from the door. The sensor detects a person or object and holds the door open as long as they are in or near the threshold area, even if they stop or pause.

MOTION DETECTION

The large detection area provides fast detection for any traffic, including trucks, approaching from any angle. The sensors enhanced pattern depth enables it to detect people and objects farther away and allows the door to open conveniently for them. The presence and motion detection areas can be adjusted independently.

EASY ADJUSTMENT

Installation time can be reduced to a minimum by using easily set switches and trimmers, therefore the sensor can be quickly adjusted for many different applications. To adjust the presence detection area the use of an Optex Infrared finder is recommended.

QUALITY

Optex automatic door sensors guarantee premium performance and include a 3-year full replacement warranty.

SPECIFICATIONS Model	OA-4500	
Colour	Black / silver	
Mounting height	2.5 m (8'2") to 4.5 m (14'9")	
Detection area	See detection area	
Detection method	Active infrared reflection method (all presence detection)	
Depth adjustment	4th and 5th rows: +26° to +44° 1st to 3rd rows -6° to +6°	
Power supply	12 to 24V AC/DC	
Power consumption	<100mA (at DC24V)	
Operation indicator	Green: stand-by Red: 1st row detection Orange: 2nd to 5th rows detection	
Output	1st & 2nd rows N.C./N.O. selectable 50V0.3A max. (resistance load) 3rd to 5th rows N.C./N.O. selectable 50V0.3A max. (resistance load)	
Relay hold time	Approx. 0.5 sec.	
Operating temperature	-20°C - +55°C (-4°F - +131°F)	
Weight	320 g	
Accessories	Operation manual, mounting screws, mounting template, area adjustment tool, cable 4 m	

1st row 2nd row 3rd row 4th row 5th row

Mounting height	3,000 (9'10")	3,500(11'6")	4,000(13'2")	4,500(14'9")
Area depth A	200 (8")	230(9")	260(10")	290(11")
Area depth B	580(1′11″)	670(2′22″)	760(2'6")	850(2'9")
Area depth C	1,100(3'7")	1,300(4'3")	1,480(4′11″)	1.660(5′5″)
Area depth D	1,850(6′1″)	2,160(7′1″)	2,460(8′1″)	2,760(9'1")
Area depth E	2,600(8'6")	3,030(9'11")	3,460(11'4")	3,890(12'9")
Areawidth F	1,810(5′11″)	2,110(6′11″)	2,400(7′11″)	2,700(8′10″)
Area width G	3,790(12′5″)	4,420(14'6")	5,050(16′7″)	5,680(18'8")
Area depth Z	300(12")	350(1′2″)	400(1'4")	450(1'6")

OA-4500 – Active infrared door sensor 07-2013



Active infrared Door Sensor



Easy installation Advanced Side screen safety
Quality Safety Active infrared Flexible Monitored presence Certified Sensitivity
Threshold safety

The Optex OA-6500 is the new active infrared door sensor standard for use on industrial doors up to a mounting height of 6,5 meter. The OA-6500 is developed as a combination sensor for safety and activation, the active infrared presence detection protects against early closing of the door while the activation area activates the door when entering the detection area. The Optex OA-6500 meets market requirements in a variety of industrial door applications.

Suitable for industrial applications

The OPTEX OA-6500 has a lot of functions optimized for industrial doors.

- The 1st row equipped with door cancel function reduces the malfunction caused by the door movement.
- The activation & safety outputs can be selected from N.C. and N.O. simply by selecting the dipswitches.
- The automatic infinite presence detection increase safely and avoid unwanted door opening due to sudden change in floor condition.

Motion detection

The large detection area provides fast detection for any traffic, including trucks, approaching from any angle. The sensor's enhanced pattern depth enables it to detect objects farther away and allows the door to open conveniently. The presence and motion detection area's can be adjusted independently.

Easy adjustment

Installation time can be reduced to a minimum by using easily set switches and trimmers, therefore the sensor can be quickly adjusted for many different applications. To adjust the presence detection area the use of an OPTEX Infrared finder is recommended.

Active infraredDoor Sensor

Model OA-6500 Colour Black Mounting height 2.5 m(8'2") to 6.5 m(21'4") Detection area See detection area Detection method Active infrared reflection method (all presence detection) 3rd row: +30° to +50° Depth adjustment 1st and 2nd rows -15° to +5° Power supply 12 to 24V AC/DC <2.5W (<3.5VA at AC) Power consumption Operation indicator Green / stand-by Red / 1st row detection Orange / 2nd and 3rd rows detection **Activation Output** When 3rd rowsdetect N.C./N.O. selectable 50V0.3A max. (resistance load) Safety Output When 1st and 2nd row detects N.C./N.O. selectable 50V0.3A max. (resistance load) Relay hold time Approx. 0.5 sec. Operating temperature -20° C to +55° C Weight 600g Accessories 1 Operation manual 2 Mounting screws 1 Mounting template 1 High mount window 1 Cable 4 m 1 Protection sticker

	[Standard window]	[High mount window]
etection area chart	3rd row 3rd row G Mounting Height IZ A B C D	1st row 2nd row 3rd row
Φ	: Emitting spots	: Emitting spots
	: Emitting spots (Can be eliminated)	: Emitting spots (Can be eliminated)

. Emitting spots (Can be eliminated	. Ellitting spots (Can be ellitiliated)			
Mounting height	Star	ndard wind	ow	High mount window
	2.50	3.50	4.50	5.50 6.50
	(8'2")	(11'6")	(14'9")	(18'1) (21'4")
Area depth A	0.15	0.21	0.28	0.34 0.40
	(6")	(8")	(11")	(1'1") (1'4")
Area depth B	0.56	0.79	1.01	1.24 1.47
	(1'10")	(2'7")	(3'4")	(4'1") (4'10")
Area depth C	0.68	0.96	1.24	1.51 1.79
	(2'3")	(3'2")	(4'1")	(4′11″) (5′11″)
Area depth D	1.34	1.87	2.41	2.94 3.48
	(4'5")	(6'2")	(7′11″)	(9'8") (11'5")
Area width E	1.53	2.15	2.76	2.79 3.30
	(5'1")	(7′1″)	(9'11")	(9'2") (10'10")
Area width F	3.64 (11'11")		6.56 (21'7")	7.23 8.55 (23'9") (28'1)
Area width G	3.84	5.38	6.91	7.62 9.01
	(12'7")	(17'8")	(22'8")	(25') (29'7")
Area depth Z	0.15	0.22	0.28	0.34 0.41
	(6")	(9")	(11")	(1'1") (1'4")

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