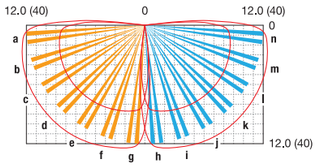
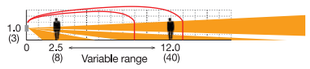
Coverage (Low mount)

Top view — Unit: m (ft.)

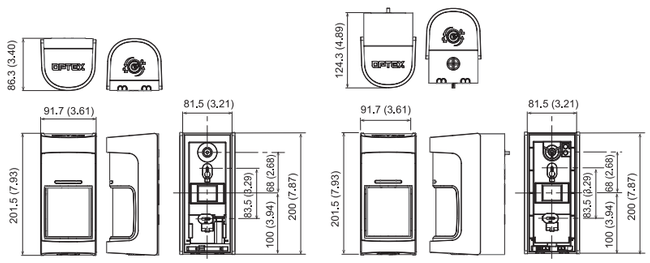


Side view

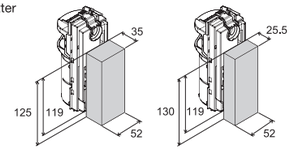


Dimensions

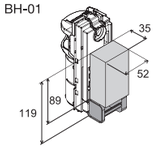
Wired Model — Battery Operated Model — Unit: mm (inch)



Wireless transmitter and battery



with BH-01



Unit: years (approx.)

	Model	WXS-RAM		WXS-RDAM	
	Interval (sec.)	120	5	120	5
Battery type	CR123A (3 V DC, 1 300 mAh)	5	3.5	3.5	1
	CR2 (3 V DC, 750 mAh)	3	2	2	0.5
	1/2AA (3.6 V DC, 1 000 mAh)	4	2.5	2.5	0.8

Options

Plug-in EOL (PEU)

Pole mount plate (PMP-01)

Battery holder (BH-01)

Back box (WXI-BB)

Area masking plate x 10 (MKP-01)
5 pcs of area masking plates are included.

Specifications

Model		WXS-AM	WXS-DAM	WXS-RAM	WXS-RDAM
Detection method		Passive infrared	Passive infrared & Microwave	Passive infrared	Passive infrared & Microwave
PIR coverage		Hight mount: 9.0 m (30') 180°wide Low mount: 12.0 m (40') 180°wide			
PIR zones		Hight mount: Horizontal 14 pairs, vertical 4 layers Low mount: Horizontal 14 pairs, vertical 2 layers			
PIR distance limit		Hight mount: 9.0 m (fixed) Low mount: 2.5 to 12.0 m (Stepless adjustment)			
Detectable speed		0.3 to 2.0 m/s (1' to 6'7"/s)			
Sensitivity		2.0℃ (3.6°F) at 0.6 m/s Selectable for each side individually			
Power input		9.5 to 18 V DC		3.0 to 3.6 V DC lithium battery	
Current draw (except walk test)		23 mA max. at 12 V DC	24 mA max. at 12 V DC	19 µA stand-by 4 mA max. at 3 V DC	24 µA stand-by 6 mA max. at 3 V DC
Alarm period		2.0 ± 1.0 sec.			
Warm-up period		60 sec. or less (LED blinks)			
Alarm (R) output		28 V DC 0.1 A max. [Individual; Right or General], [N.O. or N.C.] are selectable		Solidstate switch, 10 V DC 0.01 A max. [Individual; Right or General], [N.O. or N.C.] are selectable	
Alarm (L) output		28 V DC 0.1 A max. [Individual; Left or General], [N.O. or N.C.] are selectable		Solidstate switch, 10 V DC 0.01 A max. [Individual; Left or General], [N.O. or N.C.] are selectable	
Trouble output		N.C. 28 V DC 0.1 A max.		(with tamper) Solidstate switch, 10 V DC 0.01 A max. [N.O. or N.C.] are selectable	
Tamper output		N.C. 28 V DC 0.1 A max. Open when either the cover, main or base unit is removed		-	
LED indicator	Red	1. Warm-up 2. Alarm 3. Masking detection 4. "High mount" setting (When the tamper switch is activated, LED blinks if it is "High mount" setting.)		1. Warm-up 2. Alarm 3. Masking detection 4. "High mount" setting (When the tamper switch is activated, LED blinks if it is "High mount" setting.)	
	Yellow	-	1. Warm-up 2. MW detection	-	1. Warm-up 2. MW detection
Operation temperature (except batteries)		-30℃ to +60℃(-22°F to +140°F)	-20°C to +45℃(-4°F to +113°F)	-30°C to +60°C(-22°F to +140°F)	-20°C to +45°C(-4°F to +113°F)
Environment humidity		95% max.			
Internation protection		IP 55			
Mounting		Wall, Pole (Outdoor , Indoor)			
Mounting height		Hight mount:2.0 m (6' 7") Low mount: 0.8 to 1.2 m (2' 7" to 4')			
Weight		585 g (20.7 oz)	625 g (22.1 oz)	730 g (25.8 oz.)	770 g (27.2 oz.)
Accessories		[1] Area masking plate x 5 [2] Mounting screw (4 x 20 mm) x 2 [3] Lock screw x 1		[1] Connector for POWER and ALARM (R) [2] Connector for ALARM (L) [3] Connector for TROUBLE [4] Velcro tape [5] Area masking plate x 5 [6] Mounting screw (4 x 20 mm) x 2 [7] Lock screw x 1	

- Specifications and designs are subject to change without prior notice.
- These units are designed to detect an intruder and activate an alarm control panel. Being only a part of a complete system, we cannot accept responsibility for any damages or other consequences resulting from an intrusion.

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OPTEX
Sensing Innovation

180 degree PANORAMIC OUTDOOR DETECTOR

WX SHIELD series

External sensing you can depend upon.

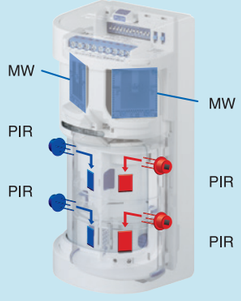
WIRED MODEL
WXS-AM : 12m(40ft), 180 degrees with anti-masking
WXS-DAM : with microwave

BATTERY OPERATED MODEL
WXS-RAM : 12m(40ft), 180 degrees with anti-masking
WXS-RDAM : with microwave

SHIELD: the new shape of security

Integration of 4 PIR and 2 microwave sensors and SHIELD CONCEPT DESIGN

Reliable



4PIR + 2MW technology

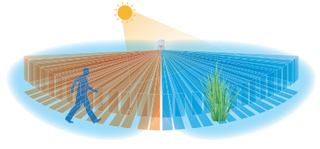
(WXS-DAM and WXS-DRAM only)

The PIR & microwave detection range, sensitivity, alarm output can be set separately for the left and right detection areas which provides more flexibility of detection area settings with great reliability against false alarms.

Stability against light disturbance

(WXS-DAM and WXS-DRAM only)

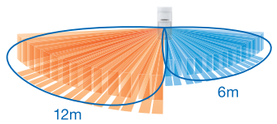
WXS series integrated algorithm of both PIR and Microwave provides the ultimate stability in detection performance. In a field where strong sun hits the land or facing direct light beams from traffic.



Individual detection area size

(WXS-DAM and WXS-DRAM only)

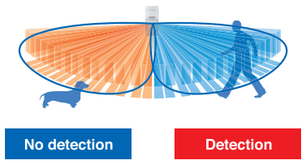
Detection distance can be easily adjusted between 2.5m(8ft) and 12m(40ft) by left and right sliding lower PIR units and DIP switch setting of MW sensitivity individually.



Panoramic triple layer detection

(WXS-DAM and WXS-DRAM only)

WXS series triggers an alarm signal only when all of upper & lower PIR sensors and microwave sensor detect a movement.



Individual sensitivity setting

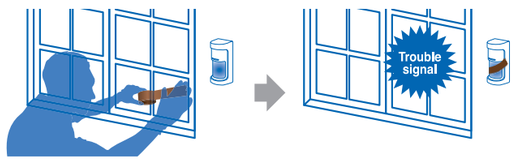
Detection sensitivity can be set to High, Medium and Low by left and right switches individually.

Individual alarm outputs

WXS triggers alarm signals both left and right side individually and it's useful for PTZ activation, direction recognition and changing detection pattern by day and night with a CP.

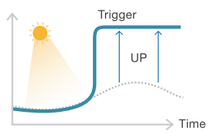
Self-learning IR digital anti-masking function

WXS series detect covering objects on lens surface. IR digital anti-masking function optimizes trigger level of trouble outputs generated by masking depends on status of lens surface. A well-calibrated adjustment for both of emitting and receiving level of IR LED fluctuating by temperature contributes to stable anti-masking.



Sunlight canceling

The trigger level of anti-masking is automatically adjusted when sunlight is too strong.



Rainwater and insect canceling

Small objects such as a spider or rainwater can be cancelled.

Web based manual for wired models
http://navi.optex.net/manual/50276

Web based manual for battery operated models
http://navi.optex.net/manual/50278

Basic common features

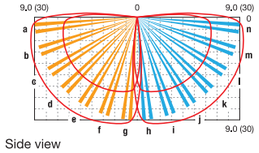
- Double conductive shielding
- Sensitivity adjustment switch
- SMDA logic (Super Multidimensional Analysis)

Convenient

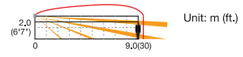
Selectable mounting height

WXS series can be installed at 2.0m(6'7") high, it's effective to avoid vandalism or masking of lens. In this case, PIR detection distance is fixed as max. 9 m (30').

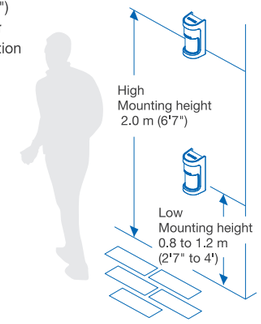
Top view



Side view



Unit: m (ft.)



Blue Touch™

All accessible parts are colored in blue, making an installation a more friendly procedure.

All the components needed for the sensor's adjustment and settings are in blue.

Easy to adjust the detection area

Day /night mode

Night mode is selectable if alarm outputs are requreid only when ambient illuminance becomes dark. For example, it can be used for lighting control.

Screw free design

You can open / close front cover and remove / put main unit without any screws. It contributes to reduction of installation time

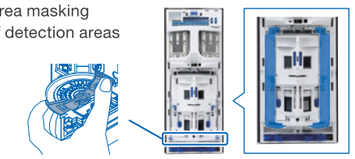
Easy open | Remove | Put main unit | Auto lock

Automatic walk test
It automatically begins when you close front cover and ends after 3 minutes.

Easy and flexible detection area settings

Area masking shutter

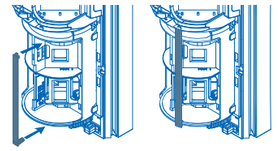
By rotary sliding area masking shutter, the size of detection areas can be changed.



When area masking shutter's position is that left is d and right is k, detection area a-d and k-n are masked.

Area masking plate

Unwanted detection areas can be masked by included area masking plate.



When a area masking plate is set on position h, detection area h is masked.

Secure A sense of security, designed for you

EOL module socket

(WXS-AM, DAM only)

Optional EOL (end of line) resistor modules are available.

Wide LED window

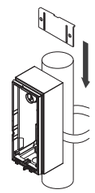
Wide and bright LED for a recognition from a distance.

Cover tamper

A tamper output is generated when front cover is open.

Pole mount (option PMP-01)

Not only wall mount, pole mount is available with optional pole mount plate (PMP-01) and a metal band up to 23 mm (1 inch) in width.



Back tamper

A tamper output is generated when unit is removed from the wall.

Level indicator

WXS series features a level indicator to ease the installation process.