

# 180 degree PANORAMIC OUTDOOR DETECTOR

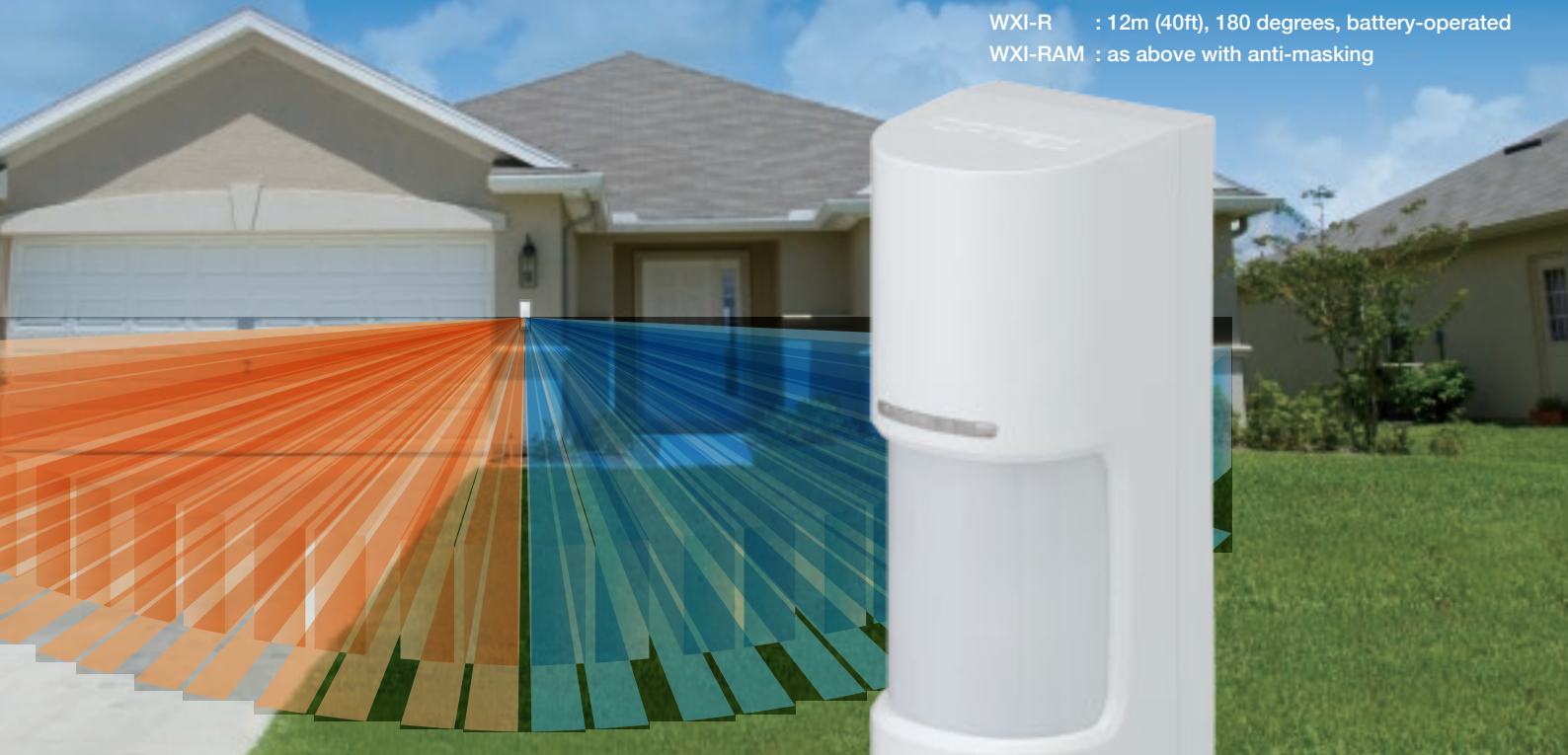
## WX Infinity series

### WIRED MODELS

WXI-ST : 12m(40ft), 180 degrees, standard  
WXI-AM : as above with anti-masking

### BATTERY OPERATED MODELS

WXI-R : 12m (40ft), 180 degrees, battery-operated  
WXI-RAM : as above with anti-masking



## External sensing you can rely on

The OPTEX WXI series is a family of external intrusion detection sensors built upon years of proven experience. The series uses both analogue and digital technologies to detect approaching intruders before they gain access into residential or commercial premises. With its comprehensive 180° field of view and capabilities to adapt its settings to the environment, the WXI series provides an effective outdoor detection solution suitable for new and existing security systems.

# 180 degree wall-to-wall coverage

Adjustable detection areas with customised masking ability



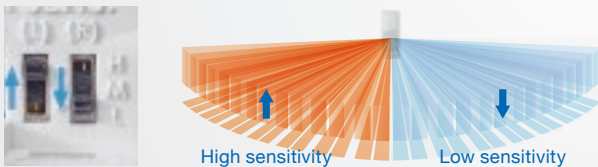
## Individual left/right settings

### Individual alarm outputs

The WXI features two completely independent 90 degrees detection areas (left and right), triggering independent alarm outputs which is very useful for PTZ activation, direction recognition and changing detection pattern by day and night with a control panel.

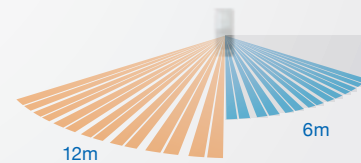
### Individual sensitivity settings

Detection sensitivity can be individually set to High, Medium or Low for the left and right detection areas, using the corresponding switches.



### Independent detection areas

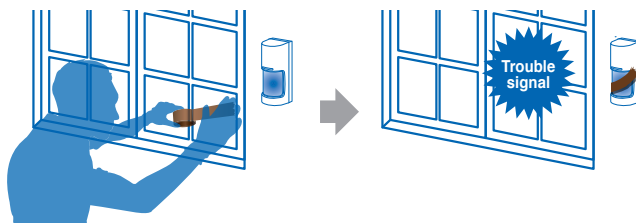
The left and right detection distance can be independently set at 2.5m (8ft), 3.5m (12ft), 6.0m (20ft), 8.5m (28ft) or 12m(40ft) using a selector switch located in lower front.



## Reliability

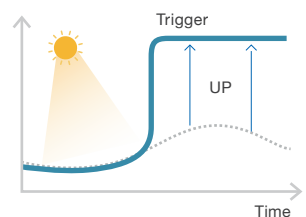
### Self-learning IR digital anti-masking function

WXI detects objects covering the lens surface. IR digital anti-masking function adjusts a trigger level of trouble outputs generated by masking. Both emitting and receiving level of IR LED are optimized in real time to different environmental conditions. This enables stable monitoring of the status of lens surface.



### Sunlight disqualification

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



### Raindrop and insect resistance

The WXI series is resistant to raindrops, insects and spiders.



### AND logic function to reduce false alarms

WXI only triggers an alarm signal when both upper and lower detection areas detect movement.



### SMDA logic (Super Multidimensional Analysis)

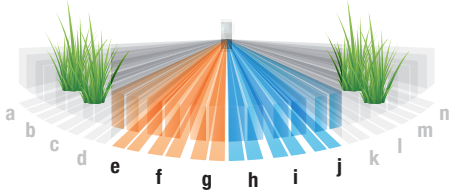
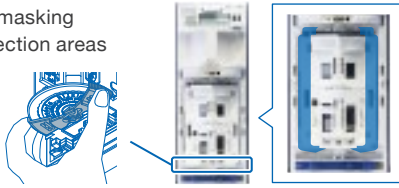
Optex's SMDA algorithm can differentiate between various noise factors such as climate changes, vegetation sways and genuine intrusions.



# Easy and flexible detection area settings

## Area masking shutter

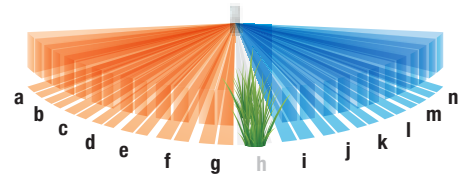
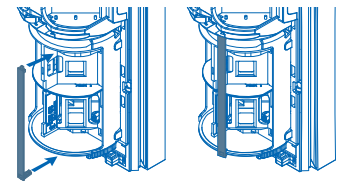
By rotating the sliding masking shutter, the size of detection areas can be changed.



Picture showing the masking shutter positioned on "d" for the left detection area and k for the right area. The areas a-d and k-n are masked.

## Area masking plate

Unwanted detection areas can be masked by optional area masking plate (MKP-01).



When a MKP-01 is set on position h, detection area h is masked.

# Mechanical features

### EOL module socket (WXI-ST, AM only)

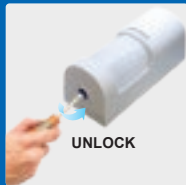
Optional EOL (end of line) resistor modules are available.

### Wide LED window

Wide and bright LED for a recognition from a distance.

### Screw free design

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



Easy opening



Remove main unit



Insert main unit



Auto lock

### Back tamper

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

### Pole mount plate (option PMP-01)

Suitable for a metal band up to 23 mm (1 inch) in width.



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

# Applications



For residential



For rooftop



For substation

## Other common features for all models

- Double conductive shielding
- Cover tamper

### Web based manual for wired models

<http://navi.optex.net/manual/50196>



### Web based manual for battery operated models

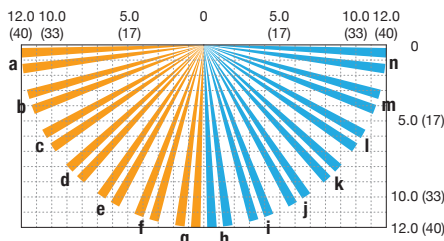
<http://navi.optex.net/manual/50198>



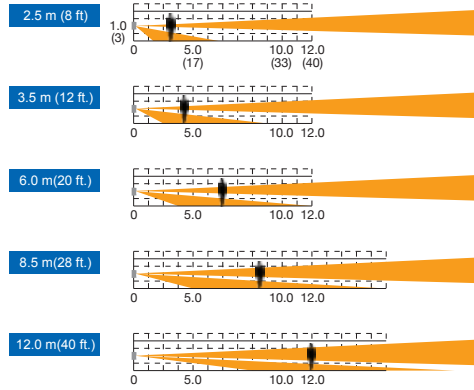
## Coverage

Unit: m (ft.)

Top view



Side view

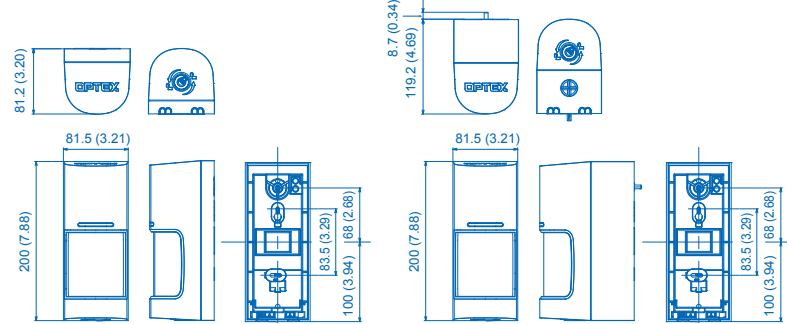


## Dimensions

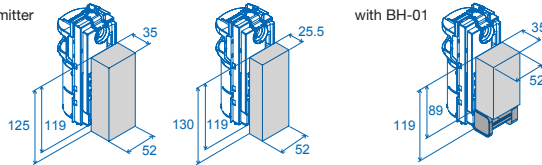
Unit: mm (inch)

Wired Model

Battery-Operated Model



Wireless transmitter and battery



## Options



Plug-in EOL (PEU)

Pole mount plate (PMP-01)

Battery holder (BH-01)

Back box (WXI-BB)

Area masking plate (MKP-01)

## Specifications

Model	WXI-ST	WXI-AM	WXI-R	WXI-RAM
Detection method	Passive infrared		Passive infrared	
PIR coverage	180° wide		180° wide	
PIR zones	Horizontal 14 pairs, vertical 2 layers		Horizontal 14 pairs, vertical 2 layers	
PIR distance limit	From 2.5m to 12m adjustable		From 2.5m to 12m adjustable	
Detectable speed	0.3 to 2.0 m/s (1' to 6'7"/s)		0.3 to 2.0 m/s (1' to 6'7"/s)	
Sensitivity	2.0 °C (3.6°F) at 0.6 m/s Selectable for each side individually		2.0 °C (3.6°F) at 0.6 m/s Selectable for each side individually	
Power input	9.5 to 18 VDC		3 to 3.6 V DC lithium batteries	
Current draw	21 mA max. at 12 VDC	23 mA max. at 12 VDC	15 µA stand-by 4 mA max. at 3 V DC except walk test	16 µA stand-by 4 mA max. at 3 V DC except walk test
Alarm period	2.0 ±1 sec.		2.0 ±1 sec.	
Warm-up period	60 sec. or less (LED blinks)		60 sec. or less (LED blinks)	
Alarm (R) output	28 VDC 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 VDC 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 VDC 0.1 A max.	Solidstate switch, 10 V DC 0.01 A max. [N.O. or N.C.] is selectable	
Tamper output	N.C. 28 VDC 0.1 A max. Open when either the cover, main or base unit is removed		Tamper output is shared with trouble output.	
LED indicator (DIP switch ON or Walk test)	Red LED ; 1. Warm-up 2. Alarm	Red LED ; 1. Warm-up 2. Alarm 3. Masking detection	Red LED ; 1. Warm-up 2. Alarm	Red LED ; 1. Warm-up 2. Alarm 3. Masking detection
Operation temperature	-30 °C to +60 °C (-22°F to +140°F)		-30 °C to +60 °C (-22°F to +140°F) except batteries	
Environment humidity	95% max.		95% max.	
International protection	IP 55		IP 55	
Mounting	Wall, Pole (Outdoor, Indoor)		Wall, Pole (Outdoor, Indoor)	
Mounting height	0.8 to 1.2 m (2'7" to 4')		0.8 to 1.2 m (2'7" to 4')	
Weight	420 g (14.8 oz.)	440 g (15.5 oz.)	600 g (21.2 oz.)	
Accessories	Mounting screw (4 x 20 mm) x 2, lock screw x 1		Connector for POWER and ALARM (R), Connector for ALARM (L) Connector for TROUBLE, Velcro tape Mounting screw (4 x 20 mm) x 2, Lock screw x 1	

Unit: years (approx.)

- 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.

	WXI-R		WXI-RAM	
Interval (sec.)	120	5	120	5
CR123A (3V DC, 1300 mAh)	5	3.5	5	3.5
CR2 (3V DC, 750 mAh)	3	2	3	2
1/2AA (3.6V DC, 1000 mAh)	4	2.5	4	2.5



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