

# Dual PIR & Microwave Detector

OPT-VX1-DAM-X5

Residential Outdoor Ready IP55



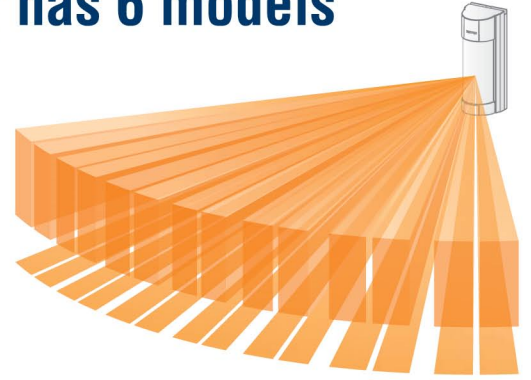
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Sensing Innovation

# Re-defining the Standard: VX-Infinity has 6 models to choose from, including RDAM with innovative low current microwave technology.




## PIR DETECTOR

VXI-ST (Wired model)  
 VXI-R (Battery operated model) 

Building upon features inherited from the VX-40 series, VX Infinity presents infinite possibility with the power of digital processing. VXI-ST/R demonstrates a long & stable performance in typical outdoor environment.


## PIR DETECTOR with ANTI-MASKING

VXI-AM (Wired model)  
 VXI-RAM (Battery operated model) 

Active IR Anti-masking detects covering objects on lens surface when monitoring of the detector status is required.



## PIR and MICROWAVE DETECTOR with ANTI-MASKING

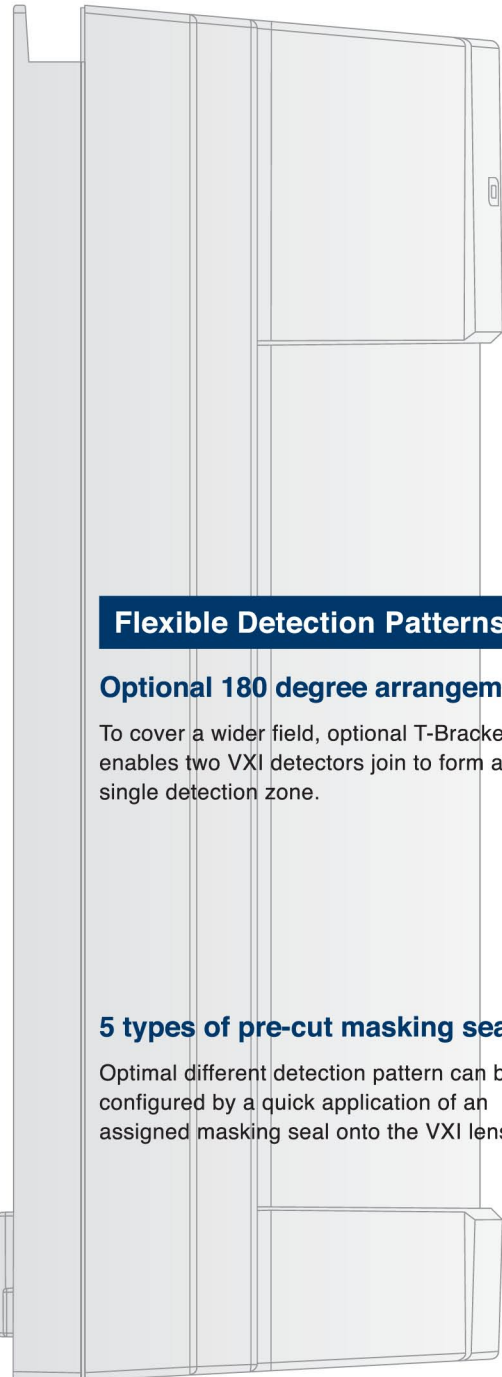
VXI-DAM (Wired model)  
 VXI-RDAM (Battery operated model) 

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, DAM/RDAM offers higher false alarm immunity.



REAL SIZE

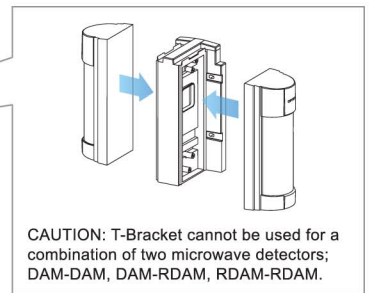
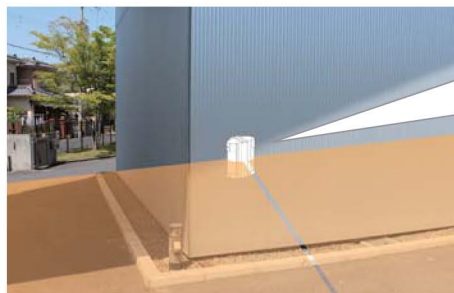
VXI-ST/VXI-AM/VXI-DAM  
 without Back Box



### Flexible Detection Patterns

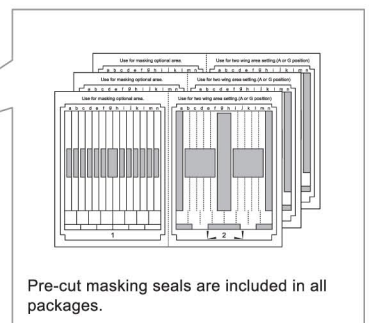
#### Optional 180 degree arrangement.

To cover a wider field, optional T-Bracket enables two VXI detectors join to form a single detection zone.



#### 5 types of pre-cut masking seals included for area configurations

Optimal different detection pattern can be configured by a quick application of an assigned masking seal onto the VXI lens.





# Expanded Features in a Down-sized Body

VXI reduced its profile size and increased its aesthetic appeal to be adapted at various installation sites.

### Wireless Ready

A wireless transmitter of your choice can be accommodated in VXI-R/RAM/RDAM models. These models consume minimum electrical current\* from a battery. Optional battery box (RBB-01) can expand the battery capacity to prolong an operation period.

\*As low as 9 micro amperage at a standby.

Wireless Trigger Life Time* Reference		
VXI	R, RAM	RDAM
<b>CR123</b> (3VDC 1300mAh)	Approx 6 years	Approx 4 years
<b>CR2</b> (3VDC 750mAh)	Approx 4 years	Approx 2 years

\*WTLT is an approximation based on hypothetical condition operated with settings; LED(OFF), AM(ON), Battery Saving Timer(120sec)

### Versatile Mounting Plate

VXI installation has become easier and versatile with a new mounting plate. Secure the plate on a wall and mount VXI.

Alternatively, use a metal band with less than 25mm (1inch) width to secure the VXI onto any diameter of poles. Optional wall tamper modules are applicable to either type of installations.

### EOL Module Socket

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

### Infinity Housing

IP55 Protection  
UV Resistant ASA Body



IP55





Anti UV Protection




### Multipurpose Spacious Back Box

All models of VXI include a back box in their packages. The back box is designed to accommodate various wireless transmitters or can be used as a conduit or a spacer between a wall and the detector. Use of the back box is optional for wired installations.

### Tough Mod 2™ (for DAM and RDAM models)

	VX Infinity series	Conventional
Images		
PCB board Material	Ceramic	Glass epoxy
Antenna Material	Gold-plated	Tin-plated

OPEX Tough Mod™ Technology enables a long-time sustainability of Dual-detection technology. Gold-plated Tough Mod increases durability of a detector to withstand hot and humid climates. Now, Tough Mod 2 extends the capability of Dual-detection to battery operated detectors with energy saving circuits.



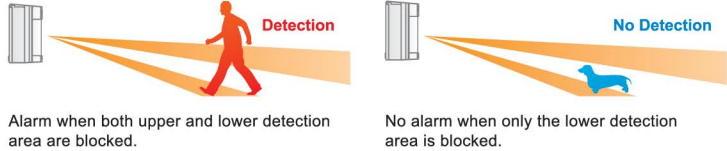
### Flexible Detection Area Setting

5 Levels of Detection Distance Adjustment      8 Horizontal Area Positions

## Digitally Enhanced Reliability

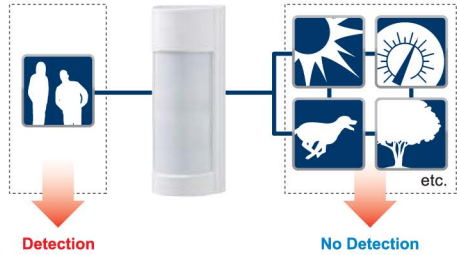
### Digital Double Layer Detection

Both an upper and a lower detection areas must simultaneously be crossed to generate an alarm. The detections are independently analyzed so that a misleading coincidence of events can be filtered out. This technology virtually eliminates detections of smaller animals in the premises.



### SMDA logic (Super Multidimensional Analysis)

All VXI models are equipped with a digitally enhanced signal recognition logic called SMDA. SMDA improves immunity against various noise factors such as climate changes and vegetation sways. VXIs expands applicable fields and reliability beyond what VX-402 was capable.



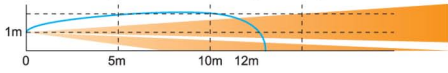
### Other Basic Common Features

- Double Conductive Shielding
- Sensitivity Adjustment Switch
- Area Defining Masking Seals
- Walk Test Mode LED
- Cover Tamper

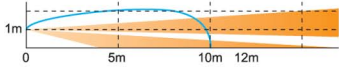
## DETECTION AREA

### SIDE VIEW (Detection Distance by Positions)

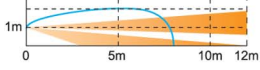
Position 1 : Approx. 12m/40ft (Default)



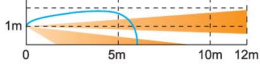
Position 2 : Approx. 8.5m/27.9ft



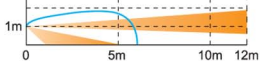
Position 3 : Approx. 6.0m/19.7ft



Position 4 : Approx. 3.5m/11.5ft

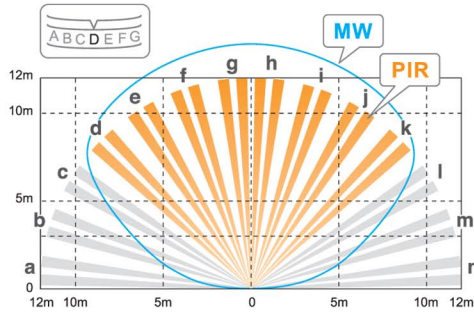


Position 5 : Approx. 2.5m/8.2ft



The actual detection distance is dependent on the thermal conditions within the given environment.

### TOP VIEW (Area diagram for D position)



## SPECIFICATIONS

Model	VXI-ST	VXI-AM	VXI-DAM
Detection method	Passive infrared		Passive infrared & Microwave
PIR coverage	12.0 m (40 ft) 90° wide / 16 zones		
PIR distance limit	12 - 2.5 m (5 levels)		
Detectable speed	0.3 - 1.5 m/s (1 - 5 ft/s)		
Sensitivity	2.0°C (3.6°F) at 0.6 m/s (2 ft/s)		
Power input	9.5 - 18 V DC		
Current draw	20 mA (max) at 12 V DC	24 mA (max) at 12 V DC	35 mA (max) at 12 V DC
Alarm period	2.0 ± 1 sec.		
Warm-up period	Approx. 60 sec. (LED blinks)		
Alarm output	N.C. / N.O. Selectable 28 V DC 0.1 A (max)		
Trouble output	-	N.C. 28 V DC 0.1 A (max)	
Tamper output	N.C. 28 V DC 0.1 A (max) open when cover removed.		
LED indicator	Red: Warm-up, alarm, masking detection (VXI-AM only)		Red: Warm-up, alarm, masking detection. Yellow: Warm-up, MW detect.
RF interference	No alarm 10 V/m		
Operating temperature	-30 - +60°C (-22 - +140°F)		-20 - +45°C (-4 - +113°F)
Environment humidity	95% max.		
International protection	IP55		
Mounting	Wall, Pole (Outdoor, Indoor)		
Mounting height	0.8 - 1.2 m (2.64 ft - 3.94 ft)		
Weight	500 g (17.7 oz.)		600 g (21.2 oz.)
Accessories	Screw (4x20 mm) x2, Wiring sponge x3, Masking seal x3		

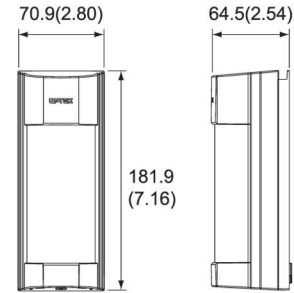
Model	VXI-R	VXI-RAM	VXI-RDAM
Detection method	Passive infrared		Passive infrared & Microwave
PIR coverage	12.0 m (40 ft) wide / 16 zones		
PIR distance limit	12 - 2.5 m (5 levels)		
Detectable speed	0.3 - 1.5 m/s (1 - 5 ft/s)		
Sensitivity	2.0°C (3.6°F) at 0.6 m/s (2 ft/s)		
Power input	3 - 9 V DC (Lithium or Alkaline Battery)		
Current draw	9µA (standby) / 4 mA (max) at 3 V DC	10µA (standby) / 4 mA (max) at 3 V DC	18µA (standby) / 8 mA (max) at 3 V DC
Alarm period	2.0 ± 1 sec.		
Warm-up period	Approx. 60 sec. (LED blinks)		
Alarm output	N.C. / N.O. Selectable-Solid State Switch 10 V DC 0.01 A (max)		
Trouble output	N.C. / N.O. Selectable-Solid State Switch 10 V DC 0.01 A (max)		
LED indicator	Disable: During normal operation. Enable: During WALK TEST or LED SW on. Red: Warm-up, alarm, masking detection (VXI-RAM only)		Disable: During normal operation. Enable: During WALK TEST or LED SW on. Red: Warm-up, alarm, masking detection. Yellow: Warm-up, MW detect.
RF interference	No alarm 10 V/m		
Operating temperature	-20 - +60°C (-4 - +140°F)		-20 - +45°C (-4 - +113°F)
Environment humidity	95% max.		
International protection	IP55		
Mounting	Wall, Pole (Outdoor, Indoor)		
Mounting height	0.8 - 1.2 m (2.64 ft - 3.94 ft)		
Weight	500 g (17.7 oz.)		600 g (21.2 oz.)
Accessories	Connector for POWER and ALARM, Connector for TROUBLE, Screw (4x20mm) x2, Masking seal x3		

\* Specifications and design are subject to change without prior notice.

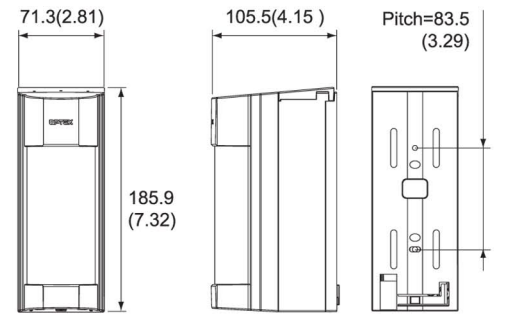
\*\* R & TTE certified : -20 to +45°C (-4 to +113°F)

## DIMENSIONS

Without a back box (VXI-ST / AM / DAM)



With a back box (VXI-R / RAM / RDAM)



Unit:mm(inch)

## OPTIONS

### VXI-T-Bracket



\*VXI-DAM and VXI-RDAM can not be used due to microwave interference.

### BATTERY BOX (RBB-01)



\*Battery not included.  
CR123A x 3(3.0VDC)  
CR2 x 3(3.0VDC)  
1/2AA x 3(3.6VDC)  
1/2AA x 6(7.2VDC x 3)\*

\*3.6 VDC 1/2 AA battery in series.

### Wall Tamper (WRS-02)

for ST, AM, DAM models



### Wall Tamper (WRS-04)

for R, RAM, RDAM models



\*Not applicable for a use of a set of dual technology models (DAM & RDAM).

### Plug in EOL(End of line) Resistor Modules

for wired models

Different values of EOL resistances can be instantly set by plugging in optional modules. Please refer to the relevant control panels manual to confirm matching resistance values.



#### PEU-A(PACK)

Alarm: 2.2kΩ / Tamper: 4.7kΩ / Trouble: 2.2kΩ

#### PEU-B(PACK)

Alarm: 4.7kΩ / Tamper: 4.7kΩ / Trouble: 6.8kΩ

#### PEU-C(PACK)

Alarm: 1.0kΩ / Tamper: 1.0kΩ / Trouble: 12kΩ

#### PEU-D(PACK)

Alarm: 1.0kΩ / Tamper: 1.0kΩ / Trouble: 3.0kΩ

#### PEU-E(PACK)

Alarm: 1.1kΩ / Tamper: 1.1kΩ / Trouble: 15kΩ

#### PEU-F(PACK)

Alarm: 5.6kΩ / Tamper: 5.6kΩ / Trouble: 5.6kΩ