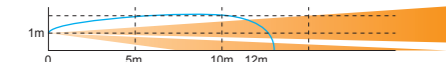


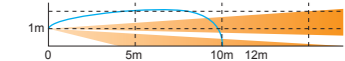
## DETECTION AREA

### SIDE VIEW (Detection Distance by Positions)

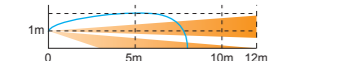
Position 1 : Approx. 12m/40ft (Default)



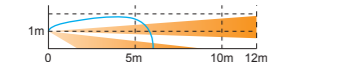
Position 2 : Approx. 8.5m/27.9ft



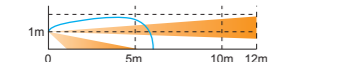
Position 3 : Approx. 6.0m/19.7ft



Position 4 : Approx. 3.5m/11.5ft



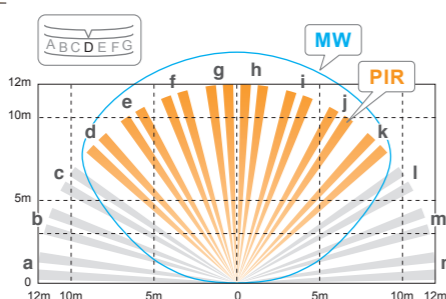
Position 5 : Approx. 2.5m/8.2ft



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.<br>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 (4×20 mm) ×2, Wiring sponge ×3, Masking seal ×3 |                        |                                                                        |

| 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.<br>Enable: During WALK TEST or LED SW on.<br>Red: Warm-up, alarm, masking detection (VXI-RAM only) |                                       | Disable: During normal operation.<br>Enable: During WALK TEST or LED SW on.<br>Red: Warm-up, alarm, masking detection.<br>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 (4×20mm) ×2, Masking seal ×3                                             |                                       |                                                                                                                                                       |

| Model                    | VXI-ST                                                                                                                               | VXI-AM                                | VXI-DAM                                                                                                                                               |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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.<br>Enable: During WALK TEST or LED SW on.<br>Red: Warm-up, alarm, masking detection (VXI-RAM only) |                                       | Disable: During normal operation.<br>Enable: During WALK TEST or LED SW on.<br>Red: Warm-up, alarm, masking detection.<br>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 (4×20mm) ×2, Masking seal ×3                                             |                                       |                                                                                                                                                       |

| 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.<br>Enable: During WALK TEST or LED SW on.<br>Red: Warm-up, alarm, masking detection (VXI-RAM only) |                                       | Disable: During normal operation.<br>Enable: During WALK TEST or LED SW on.<br>Red: Warm-up, alarm, masking detection.<br>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 (4×20mm) ×2, Masking seal ×3                                             |                                       |                                                                                                                                                       |

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

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



OPTEX CO., LTD. (JAPAN) URL: <http://www.optex.net/>

OPTEX INC. (U.S.)  
URL: <http://www.optexamerica.com/>

OPTEX DO BRASIL LTDA. (Brazil)  
URL: <http://www.optex.net/br/es/sec/>

OPTEX (EUROPE) LTD. / EMEA HQ (U.K.)  
URL: <http://www.optexeurope.com/>

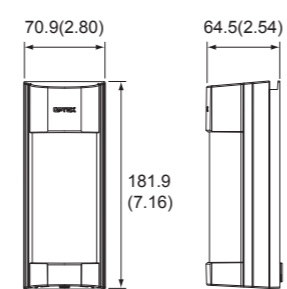
OPTEX TECHNOLOGIES B.V.  
(The Netherlands)  
URL: <http://www.optex.eu/>

OPTEX SECURITY SAS (France)  
URL: <http://www.optex-security.com/>

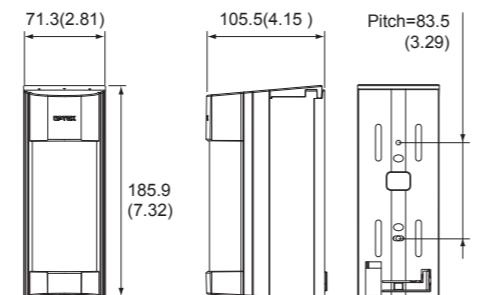
OPTEX SECURITY Sp.z o.o. (Poland)  
URL: <http://www.optex.com.pl/>

## DIMENSIONS

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



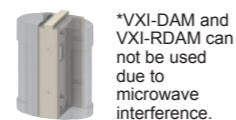
With a back box



Unit:mm(inch)

## OPTIONS

### VXI-T-Bracket

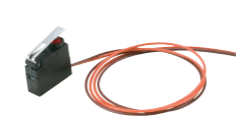


### BATTERY BOX (RBB-01)



### Wall Tamper (WRS-02)

for ST, AM, DAM models



### Wall Tamper (WRS-04)

for R, RAM, RDAM models

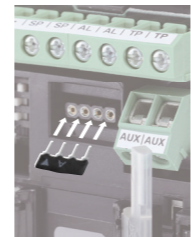


\*Not applicable for a use of a set of dual technology models (DAM & RDAM).

### 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.



# A WORLD LEADING OUTDOOR DETECTOR

- Flexible Detection Patterns
- Expanded Features in a Down-sized Body
- Digitally Enhanced Reliability

## VX Infinity<sup>TM</sup> series

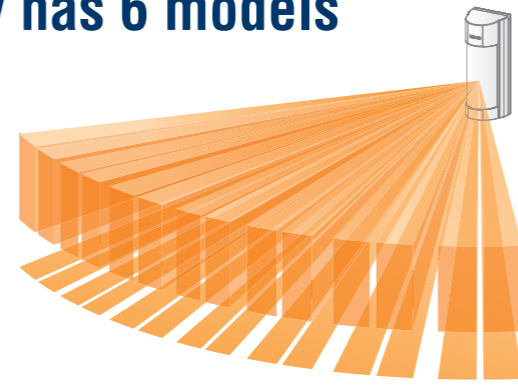
### WIRED MODEL

VXI-ST : 12m wide 2PIRs standard  
VXI-AM : Anti-masking  
VXI-DAM : 2PIRs with Microwave

### BATTERY OPERATED MODEL

VXI-R : Battery operated 12m 2PIRs  
VXI-RAM : Battery operated Anti-masking  
VXI-RDAM : Battery operated 2PIRs with Microwave

# 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)

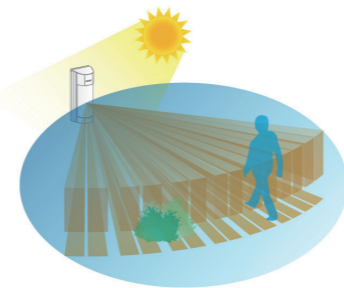
Active IR Anti-masking detects covering objects on lens surface when monitoring of the detector status is required.



## PIR and MICROWAVE DETECTOR with ANTI-MASKING

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

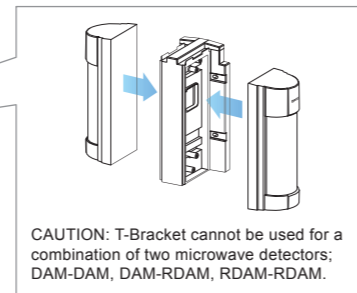
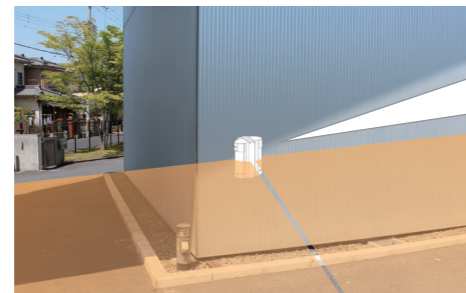
Integrated algorithm of both PIR and Microwave provides the ultimate stability in detection performance. In a field where strong sun hits the land or facing direct light beams from traffic, DAM/RDAM offers higher false alarm immunity.



## Flexible Detection Patterns

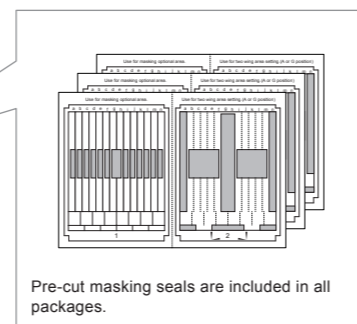
### Optional 180 degree arrangement.

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.

#### Wireless Trigger Life Time\* Reference

| VXI                  | R, RAM         | RDAM           |
|----------------------|----------------|----------------|
| CR123 (3VDC 1300mAh) | Approx 6 years | Approx 4 years |
| CR2 (3VDC 750mAh)    | Approx 4 years | Approx 2 years |

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

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

### EOL Module Socket

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

### Infinity Housing

IP55 Protection  
UV Resistant ASA Body



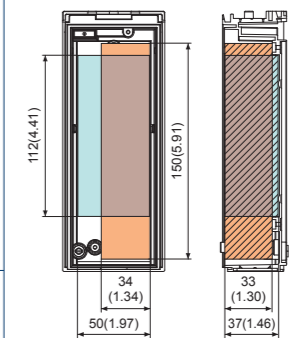
IP55

Anti UV Protection

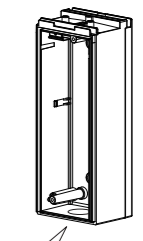


## Multipurpose Back Box

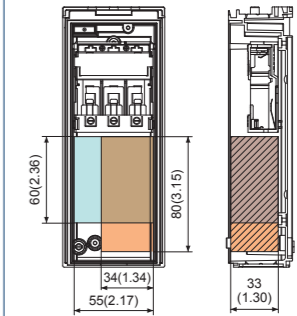
### Wireless transmitter installation



### Conduit installation



### with RBB-01



Pitch diameter φ21 (0.82)

mm (inch)

## 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.

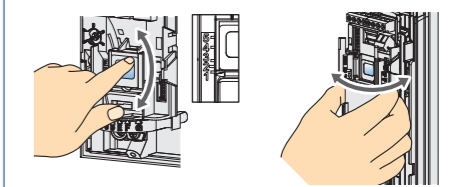


Tough Mod.2™

## Flexible Detection Area Setting

5 Levels of Detection Distance Adjustment

8 Horizontal Area Positions

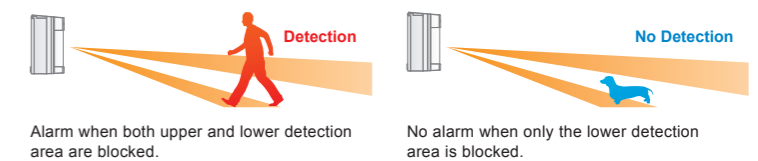


## Digitally Enhanced Reliability

### Digital Double Layer Detection

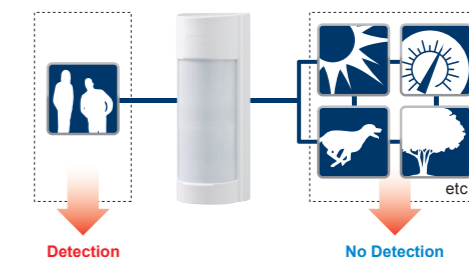
Both an upper and a lower detection areas must simultaneously be crossed to generate an alarm.

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. VXI expands applicable fields and reliability beyond what VX-402 was capable.



## Other Basic Common Features

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