

# Outdoor PIR Detector

OPT-VXI-DAM-X5

Passive Infrared & Microwave Detector



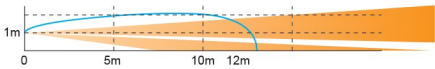
## Features

- Flexible detection patterns
- Area defining masking seals
- Double conductive shielding
- Sensitivity adjustment switch
- Digital double layer detection
- Combo microwave (10.525GHz) & passive infrared detection
- Super multidimensional analysis (SMDA logic)

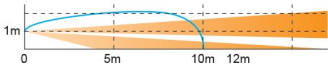
Detection Area

SIDE VIEW (Detection Distance by Positions)

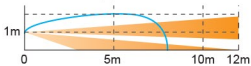
Position 1 : Approx. 12m/40ft (Default)



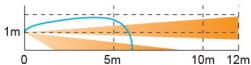
Position 2 : Approx. 8.5m/27.9ft



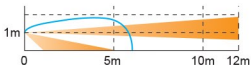
Position 3 : Approx. 6.0m/19.7ft



Position 4 : Approx. 3.5m/11.5ft

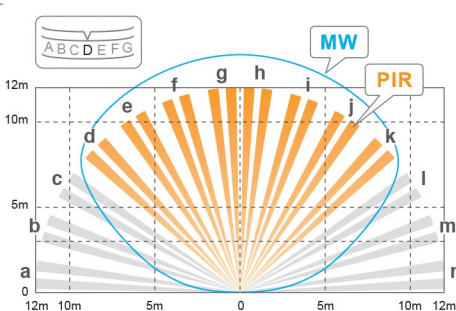


Position 5 : Approx. 2.5m/8.2ft



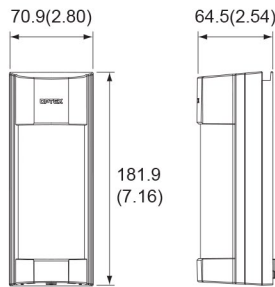
The actual detection distance is dependent on the thermal conditions within the given environment.

TOP VIEW (Area diagram for D position)

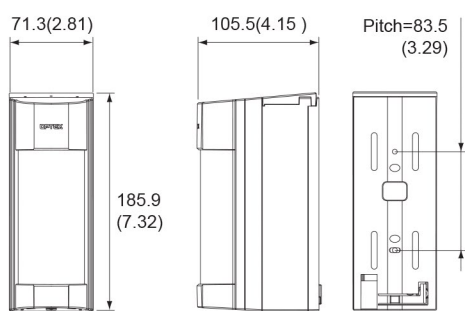


Dimensions

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



With a back box

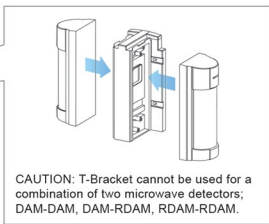
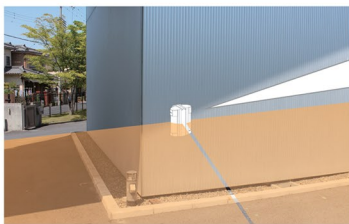


Unit:mm(inch)

Specifications

Model	VXI-DAM
Detection method	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	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. Yellow: Warm-up, MW detect.
RF interference	No alarm 10 V/m
Operating temperature	-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	600 g (21.2 oz.)
Accessories	Screw (4×20 mm) ×2 , Wiring sponge ×3 , Masking seal ×3

Flexible Detection Patterns



CAUTION: T-Bracket cannot be used for a combination of two microwave detectors; DAM-DAM, DAM-RDAM, RDAM-RDAM.

Optional 180 degree arrangement

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



Pre-cut masking seals are included in all packages.

5 pre-cut masking seals for area configurations

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

## 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.



### EOL Module Socket

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

### Infinity Housing

IP55 Protection

UV Resistant ASA Body



IP55

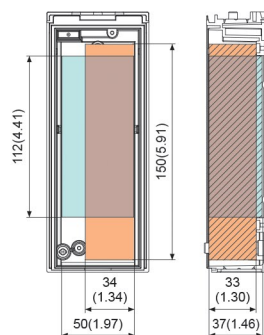


Anti UV Protection



### Multipurpose Back Box

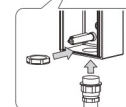
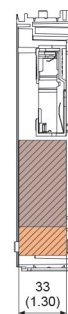
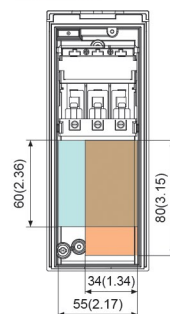
Wireless transmitter installation



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

OPTEX Tough Mod 2™ 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.

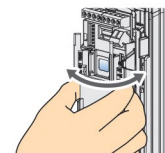
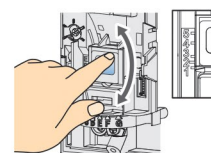


Tough Mod.2™

### 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.



Alarm when both upper and lower detection area are blocked.



No alarm when only the lower detection area is blocked.

### 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.

