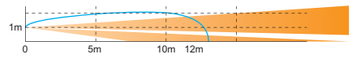
DETECTION AREA

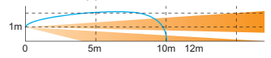
SIDE VIEW (Detection Distance by Positions)

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

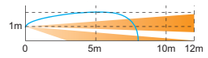


The actual detection distance is dependent on the thermal conditions within the given environment.

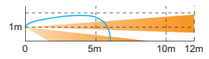
Position 2 : Approx. 8.5m/27.9ft



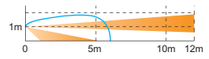
Position 3 : Approx. 6.0m/19.7ft



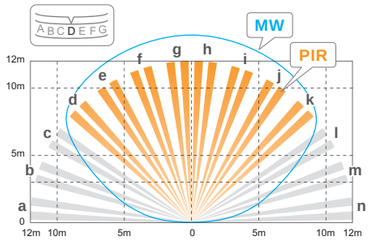
Position 4 : Approx. 3.5m/11.5ft



Position 5 : Approx. 2.5m/8.2ft



TOP VIEW
(Area diagram for D position)



SPECIFICATIONS

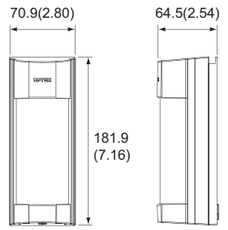
Model	VXI-ST	VXI-AM	VXI-DAM
Detection method	Passive infrared		Passive infrared & Microwave
PIR coverage	12.0 m (40 ft) 90° wide / 16 zones		
PIR distance limit	12 - 2.5 m (5 levels)		
Detectable speed	0.3 – 1.5 m/s (1 - 5 ft/s)		
Sensitivity	2.0°C (3.6°F) at 0.6 m/s (2 ft/s)		
Power input	9.5 – 18 V 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 (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. 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 (4×20mm) ×2, Masking seal ×3		

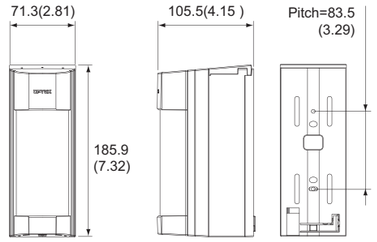
* Specifications and design are subject to change without prior notice.

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

OPTEX CO., LTD. (JAPAN)
5-8-12 Ogoto Otsu Shiga 520-0101 JAPAN
TEL: +81-77-579-8670
URL: http://www.optex.co.jp/e/

OPTEX INCORPORATED (USA)
TEL: +1-909-993-5770
Tech: (800) 966-7839
URL: http://www.optexamerica.com/

OPTEX DO BRASIL LTDA.
TEL: +55-11-2225-0934
URL: http://www.optexdobrasil.com.br/

OPTEX (EUROPE) LTD. (UK)
TEL: +44-1628-631000
URL: http://www.optex-europe.com/

OPTEX SECURITY SAS (FRANCE)
TEL: +33-437-55-50-50
URL: http://www.optex-security.com/

OPTEX SECURITY Sp.z o.o. (POLAND)
TEL: +48-22-598-06-55
URL: http://www.optex.com.pl/

OPTEX PINNACLE INDIA PRIVATE LIMITED
TEL: +91-124-4035704
URL: http://www.optex.net/in/

OPTEX KOREA CO., LTD. (KOREA)
TEL: +82-2-719-5971
URL: http://www.optexkorea.com/

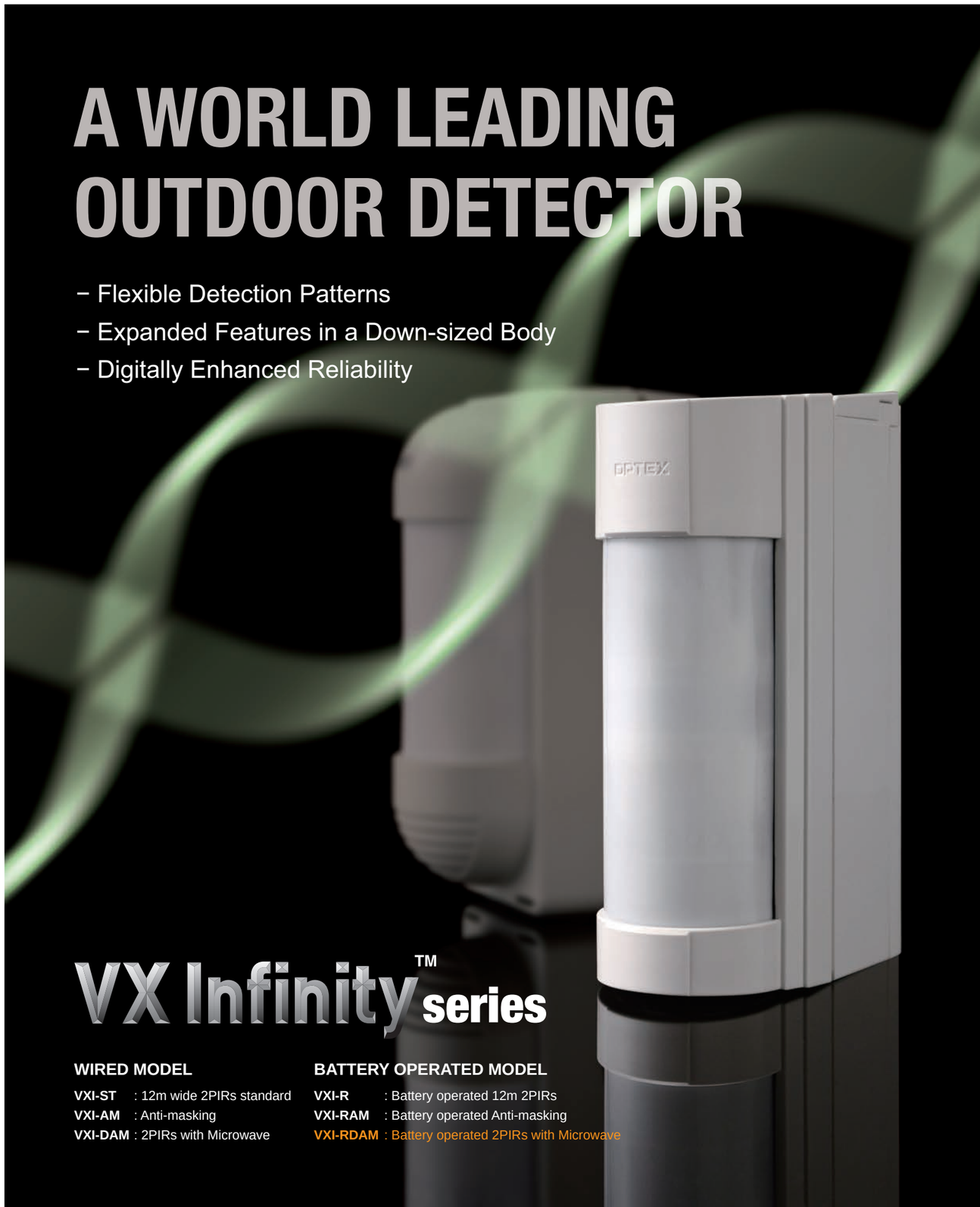
OPTEX (DONGGUAN) CO., LTD. SHANGHAI OFFICE (CHINA)
TEL: +86-21-34600673
URL: http://www.optexchina.com/

No. 77040-00-15747-1306

OPTEX
Sensing Innovation

A WORLD LEADING OUTDOOR DETECTOR

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



VX Infinity™ series

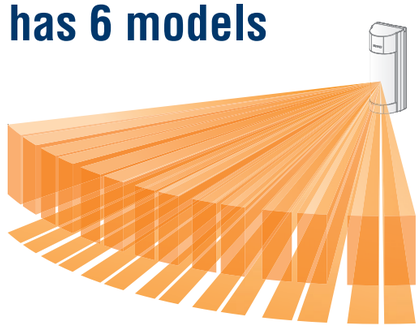
WIRED MODEL

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.



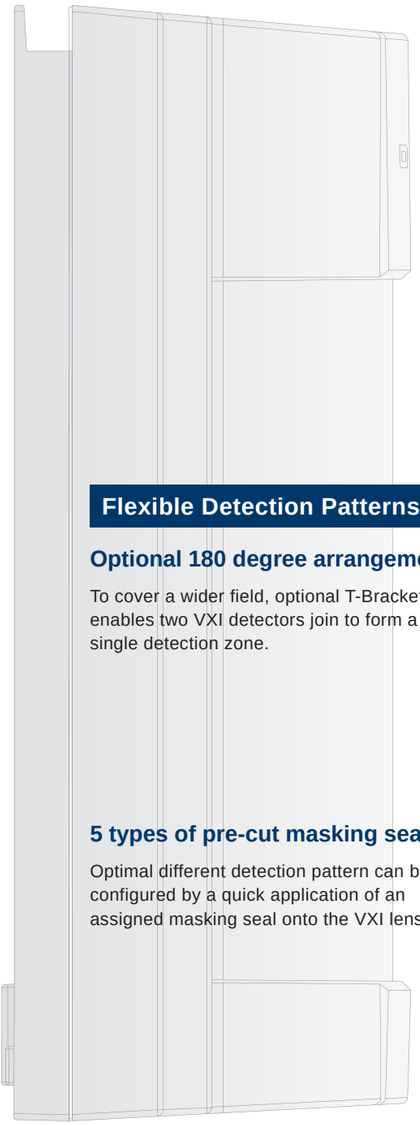
PIR DETECTOR

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.

REAL SIZE

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



PIR DETECTOR with ANTI-MASKING

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

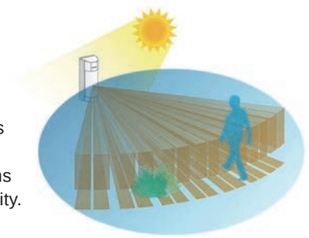
Active IR Anti-masking detects covering objects on lens surface when monitoring of the detector status is required.



PIR and MICROWAVE DETECTOR with ANTI-MASKING

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

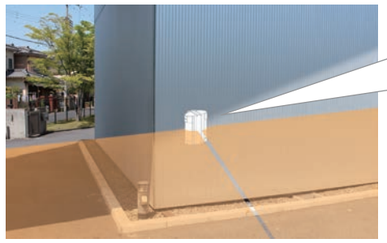
Integrated algorithm of both PIR and Microwave provides the ultimate stability in detection performance. In a field where strong sun hits the land or facing direct light beams from traffic, DAM/RDAM offers higher false alarm immunity.

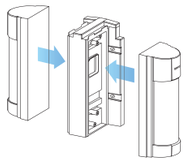


Flexible Detection Patterns

Optional 180 degree arrangement.

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

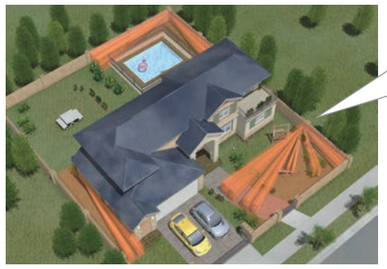


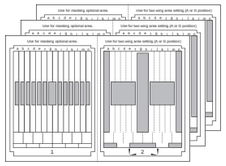


CAUTION: T-Bracket cannot be used for a combination of two microwave detectors; DAM-DAM, DAM-RDAM, RDAM-RDAM.

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.





Pre-cut masking seals are included in all packages.

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
CR123 (3VDC 1300mAh)	Approx 6 years	Approx 4 years
CR2 (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

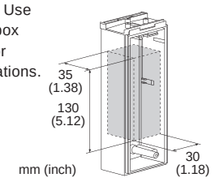
IP55 Protection
UV Resistant ASA Body

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)

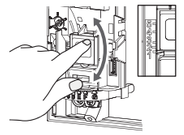
	VX Infinity series	Comventional
Images		
PCB board Material	Ceramic	Glass epoxy
Antenna Material	Gold-plated	Tin-plated

OPTEX 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.

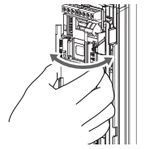
Tough Mod.2™

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.



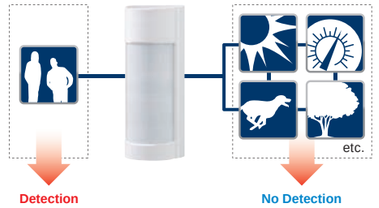
Alarm when both upper and lower detection area are blocked.



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.



Other Basic Common Features

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