OPTEX i-Series

Wireless Outdoor Detectors Catalogue

OPTEX, a leading sensor manufacturer, provides a range of quality detection systems based on infra red, microwave, laser and fibre optic technologies, to help protect any site from intrusion. Using proven technologies, OPTEX delivers multi-layered perimeter protection that secures the immediate surroundings of the perimeter, the actual perimeter line (being a fence, a wall or just a virtual line) and the site area itself. Its systems are featured in thousands of installations worldwide, from military and government facilities to power stations and other sites of critical infrastructure.

OPTEX (Europe) Limited
Platinum House
Unit 32B Clivemont Road
Cordwallis Industrial Estate
Maidenhead
Berkshire SL6 7BZ
United Kingdom

Tel   +44 (0) 1628 631 000
Fax   +44 (0) 1628 636 311
Email   marketing@optex-europe.com
Web   www.optex-europe.com

OPTEX EUROPE (Dubai Branch)
4th Floor
C-D Wing
Dubai Silicon Oasis
P.O. Box 341041
Dubai, UAE

Tel   +971 (0) 4 501 5394
Fax   +971 (0) 4 501 5777

FEATURES

- Includes Inovonics EchoStream EN1941 and battery pre-installed
- 100ft and 200ft detection ranges
- Long battery life (Batteries Included)
  AX-100TFR / AX-100TFRi: approx. 5 years
  AX-200TFR / AX-200TFRi: approx. 3 years(trans)
  AX-200TFR / AX-200TFRi: approx. 5 years(receiver)
- Easy battery replacement
- Triple tamper functions
- Low battery output and LED indication
- Intermittent output function

OPTIONS

- MP-4: Main unit mounting bracket set
  (for tower mounting)

	Model	AX-100TFRi	AX-200TFRi
	Range	100ft (30m)	200ft (60m)
	Max. arrival distance	265m	530m
	Detection method	Infrared beam interruption detection	
	Beam freq. selection	4 channel	
	Interruption period	Variable between 50, 100, 250, 500msec	
	Power source	3.6V 13.0Ah : (4) LSH20 lithium batteries manufactured by SAFT (included)	
	Current draw	810μA T:490μA + R:320μA (at 25℃,3.6VDC) 620μA T:300μA + R:320μA (at 25℃,3.6VDC)	
	Battery life	5 yrs	Trans. 3 yrs Rec. 5 yrs
Output	Alarm output	Form C-Solid State Switch : 3.6VDC, 0.01A	
	Alarm period	2 sec (±1) nominal	
	D.Q. output	Form A/B-Solid State Switch : 3.6VDC, 0.01A	
	Low battery output	Form A/B-Solid State Switch: 3.6VDC, 0.01A	
	Tamper output for Front cover	Form C: 3.6 VDC, 0.01 A activates when cover removed. (Receiver only)	
	Tamper output for Back box	Form C: 3.6 VDC, 0.01 A: activates when either back box/chassis is removed	
Indicator	Alarm Indicator (Receiver)	(1) Light on - IR Beam not received. (2) Flickering - IR Beams not received sufficiently. (3) Light off - IR Beams received.	
	Power (Transmitter)	Power ON : ON, Power OFF : OFF	
	Low battery	Voltage Reduction : flicker	
	Operating temp	-4℉-+140℉ (-20℃ - +60℃)	
	Envir. humidity	95%(Max.)	
	Alignment angle	± 90° Horizontal, ± 5° Vertical	
	Mounting	Indoor/Outdoor, Wall/Pole/Tower mounting (Optional main unit mounting brackets are required, when the units mount in the tower.)	
	Weight	56.5oz (1600g) (transmitter + receiver)	
	Int. protection	IP55	

FEATURES

- Includes Inovonics EchoStream EN1941 and battery pre-installed
- Easy short and long range masking with built in flaps and plates (HX-80NRAMi)
- Mounting height 8.3ft - 10ft
- Digital anti-masking function
- Low current draw
- Form C alarm output and tamper output
- Selectable NC/NO trouble output
- 180° angle adjustable bracket

HX-40RAMi

HX-80NRAMi

Model	HX-40RAMi	HX-80NRAMi
Detection method	Passive infrared	Passive infrared
PIR Coverage	40' x 50' (12m) 85° wide / 94 zones	80' x 6'7" (24m x 2m) narrow / 20 zones
Distance limit	13', 18', 30', 40' (4m, 5.5m, 9m, 12m)	22', 33', 42', 59' (6.5m, 10m, 13m, 18m)
Detectable speed	1 - 5ft/s	
Sensitivity	3.6℉ at 5ft/s	
Power input	3 - 7.2VDC Lithium Battery (CR123A x 3, CR2 x 3, 1/2AA x 3, 1-2AA x 6)	
Current draw	30 μA (standby) / 4mA (max) at 3VDC	
Alarm period	2.0±1 sec	
Warm-up period	Approx. 90 sec(LED blinks)	
Alarm output	Form C - Solid State - 10VDC 0.01A max	
Trouble output	N.C./N.O. Selectable - Solid State - 10VDC 0.01A	
Tamper output	Form C. 28V DC, 0.1A max. (changes when cover is removed)	
LED indicator	Disable : During normal operation. Enable : During WALK TEST or LED SW on. Red : Warm-up, Alarm, Trouble, Low battery	
RF Interference	No alarm 10 V/m	
Operating temperature	-4 - +140℉ (-20 - +60℃)	
Environment humidity	95% max	
Weatherproof	IP55	
Mounting	Wall (Outdoor, Indoor)	
Mounting height	8.3 - 10 ft. (2.5 - 3.0 m)	
Bracket adjust angle	Vertical: ± 20° Horizon: ± 95∞	
Weight	21.2 oz (600 g)	27.5 oz. (780 g)
Accessories	Bracket, Hood, Area masking seal, Screw kit (3 x 10-2, 4 x 20-4) Velcro tape×2, Alarm cable, Battery lead×2, Dummy battery kit	Bracket, Screw (4 × 20 mm) × 4, Velcro tape × 2, Alarm cable, Battery lead × 2, Dummy battery kit

detection — No detection — detection — No detection — detection — No detection
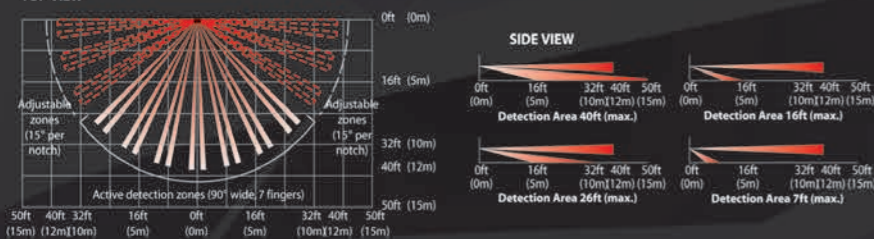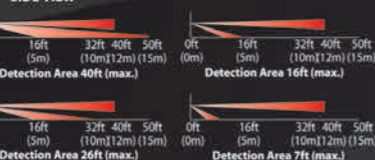

FEATURES

- Includes Inovonics EchoStream EN1941 and battery pre-installed
- Dual PIR's for extremely stable outdoor detection
- Battery saving circuit
- Form C alarm output and tamper output
- Low current draw
- Limited detection range function
- Size judging function
- Sensitivity selection switch
- Temperature compensation

Model	VX-402Ri
Coverage	40ft x 40ft (12m) 90° wide
Detection zones	14 zones
Sensitivity	35℉ at 2ft/s
Detectable speed	1ft - 5ft/s
Power supply	3 - 9 VDC lithium or alkaline battery
Current consumption	3mA (walktest, LED on) 10μA (standby)
Alarm period	Approx. 2.5 sec.
Alarm output	Form C - solid state switch : 10V DC0.01A
Battery saving time	Approx. 120 sec. or 5 sec.
Tamper swith	Form C activates when cover is removed
Pulse Count	Approx. 20 sec. 2 or 4 / Test (1pulse)
Warm-up period	Approx. 2 min.
LED indicator	Disable during normal operation Enable during walk test
Operating temperature	-4℉ to 122℉ (-20℃ to +50℃)
Environmental humidity	95% max.
RF interference	No Alarm 30V/m
Mounting height	2.6ft - 4ft (0.8m - 1.2m)
Mounting	Wall, pole
Weight	1lb 1oz (480g)
Dimesions (H x W x D)	7.8in x 3.15in x 4.25in
Weatherproof	IP54

TOP VIEW

Adjustable zones (15° per notch)

Active detection zones (90° wide, 7 fingers)

50ft 40ft 32ft 16ft 0ft 16ft 32ft 40ft 50ft
(15m) (12m)(10m) (5m) (0m) (5m) (10m)(12m)(15m)

SIDE VIEW

Detection Area 40ft (max.)
0ft 16ft 32ft 40ft 50ft
(0m) (5m) (10m)(12m)(15m)

Detection Area 16ft (max.)
0ft 16ft 32ft 40ft 50ft
(0m) (5m) (10m)(12m)(15m)

Detection Area 26ft (max.)
0ft 16ft 32ft 40ft 50ft
(0m) (5m) (10m)(12m)(15m)

Detection Area 7ft (max.)
0ft 16ft 32ft 40ft 50ft
(0m) (5m) (10m)(12m)(15m)

When only the lower zone detects a moving object, the unit is not activated.

When only the upper zone detects a moving object, the unit is not activated.

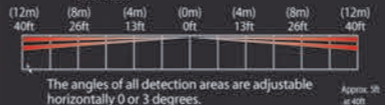When both the upper & lower zones detect a moving object, the unit is activated.

FEATURES

- Includes Inovonics EchoStream EN1941 and battery pre-installed
- Battery saving circuit
- Form C alarm output and tamper output
- Low current draw
- Limited detection range function
- Size judging function to avoid false alarms
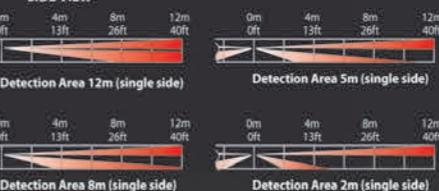- Variable detection range to 24m (12m on each side)

OPTIONS

- BA-1W: Multi angle wall mount bracket

Model	BX-80NRi
Coverage	80ft x 3ft (40ft on each side)
Detection zones	4 zones (2 zones on each side)
Sensitivity	2.0℃ at 0.6m/sec.
Detectable speed	0.3m - 1.5m/s
Power supply	3 - 9VDC lithium or alkaline Battery
Current consumption	3mA(Walktest, LED on) 15uA(Standby)
Alarm period	2 ± 1 sec.
Alarm output	Form C-Solid state switch: 10V DC 0.01A
Battery saving time	Approx. 120 sec. or 5 sec.
Tamper swith	Form C activates when cover is removed
Warm-up period	Approx. 2 min.
LED indicator	Disable during normal operation Enable during walktest or LED switch on
Operating temperature	-4℉ to 122℉ (-20℃ to +50℃)
Environmental humidity	95% max.
RF interference	No Alarm 20V/m
Mounting height	2.6ft to 4ft (0.8m - 1.2m)
Mounting	Wall
Weight	1lb 2oz (520g)
Dimesions (H x W x D)	9.16 x 2.16in x 5.04in
Weatherproof	IP55

TOP VIEW

(12m) (8m) (4m) (0m) (4m) (8m) (12m)
40ft 26ft 13ft 0ft 13ft 26ft 40ft

The angles of all detection areas are adjustable horizontally 0 or 3 degrees.

Approx. 5ft at 4ft

SIDE VIEW

Detection Area 12m (single side)
0m 4m 8m 12m
0ft 13ft 26ft 40ft

Detection Area 5m (single side)
0m 4m 8m 12m
0ft 13ft 26ft 40ft

Detection Area 8m (single side)
0m 4m 8m 12m
0ft 13ft 26ft 40ft

Detection Area 2m (single side)
0m 4m 8m 12m
0ft 13ft 26ft 40ft

When only the lower zone detects a moving object, the unit is not activated.

When only the upper zone detects a moving object, the unit is not activated.

When both the upper & lower zones detect a moving object, the unit is activated.