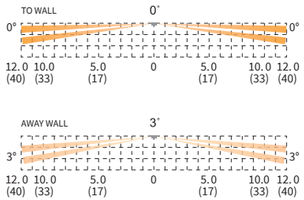
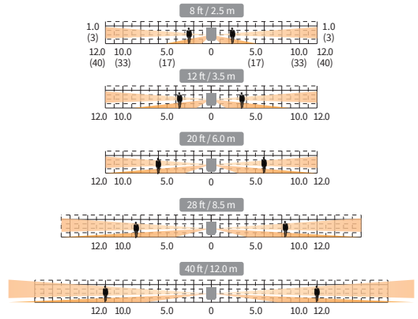
Coverage

Top view



Side view

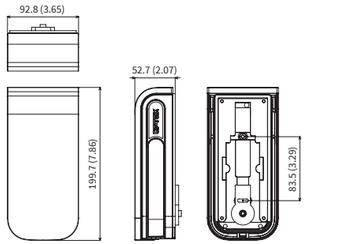
Unit: ft / m



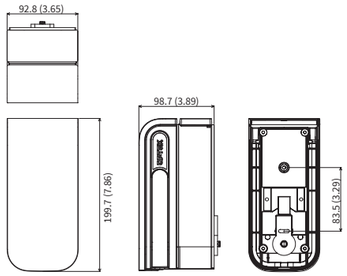
Dimensions

BXS-ST / BXS-AM

Unit: mm (inch)

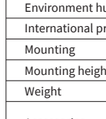


BXS-R / BXS-RAM

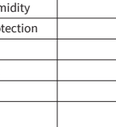


Accessories

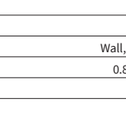
BXS Face Cover
BXS-FC (W or BL)



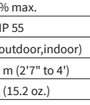
BXS Back Box
BXS-BB (W or BL)



BXS Back Box Cap
BXS-CAP (W or BL)



Replacement Lens (set)
LNS-BXS



Pole Mount Plate
PMP-01

Metal band:
23 mm or less
in width

Battery Holder
BH-01

Specifications

Model	BXS-ST	BXS-AM	BXS-R	BXS-RAM	BXS-RAMi
Detection method	Passive infrared		Passive infrared		
Coverage	24 m (80') ; 12 m (40') on each side, 4 zones ; 2 zones on each side, 180°narrow		24 m (80') ; 12 m (40') on each side, 4 zones ; 2 zones on each side, 180°narrow		
PIR distance limit	list the possible range 2.5, 3.5, 6, 8.5, 12 m		2.5 to 12 m (5 levels)		
Detection angle from wall	TO WALL：0° angled forward AWAY WALL : 3° angled forward selectable		TO WALL：0° angled forward AWAY WALL : 3° angled forward selectable		
Detectable speed	0.3 to 2.0 m/s (1' to 6'7"/s)		0.3 to 2.0 m/s (1' to 6'7"/s)		
Sensitivity	Normal ; 2.0°C (3.6°F) at 0.6 m/s Extreme high : 1.0°C (1.8°F) at 0.6 m/s selectable for each side individually		Normal ; 2.0°C (3.6°F) at 0.6 m/s Extreme high : 1.0°C (1.8°F) at 0.6 m/s selectable for each side individually		
Power input	9.5 to 18 V DC		Qty 2 of 3V DC Lithium or Alkaline batteries		
Current draw (except walk test)	31 mA max. at 12 V DC	34 mA max. at 12 V DC	15 µA stand-by / 8 mA max. at 3 V DC	16 µA stand-by / 8 mA max. at 3 V DC	25 µA stand-by / 74 mA max. at 3 V DC
Alarm period	2.0 ±1 sec.		2.0 ±1 sec.		
Warm-up period	60 sec. or less (LED blinks)		60 sec. or less (LED blinks)		
Alarm output (R)	28 V DC 0.1 A max. [Individual;Right or General], [N.O. or N.C.] are selectable		Solid-state switch, 10 V DC 0.01 A max. [Individual;Right or General], [N.O. or N.C.] are selectable		
Alarm output (L)	28 VDC 0.1 A max. [Individual;Left or General], [N.O. or N.C.] are selectable		Solid-state switch, 10 V DC 0.01 A max. [Individual;Left or General], [N.O. or N.C.] are selectable		
Trouble output	-	N.C. 28 V DC 0.1 A max.	Solid-state switch, 10 V DC 0.01 A max. [N.O. or N.C.] is selectable		
Tamper output	N.C. 28 V DC 0.1 A max. open when face cover, main unit or base unit is removed		Tamper output is shared with trouble output.		
LED indicator	Red LED ; 1. Warm-up 2. Alarm (DIP switch ON or Walk test)	Red LED ; 1. Warm-up 2. Alarm , 3. Masking detection (DIP switch ON or Walk test)	Red LED ; 1. Warm-up 2. Alarm (DIP switch ON or Walk test)	Red LED ; 1. Warm-up 2. Alarm , 3. Masking detection (DIP switch ON or Walk test)	
Operation temperature	-30°C to + 60°C (-22°F to +140°F)		-30°C to + 60°C (-22°F to +140°F)		
Environment humidity	95% max.		95% max.		
International protection	IP 55		IP 55		
Mounting	Wall, pole (outdoor,indoor)		Wall, pole (outdoor,indoor)		
Mounting height	0.8 to 1.2 m (2'7" to 4')		0.8 to 1.2 m (2'7" to 4')		
Weight	430 g (15.2 oz.)		550 g (19.4 oz.)		
Accessories	Screw (4 x 20 mm) x 2		[1] Connector for POWER and ALARM (R), [2] Connector for ALARM (L), [3] Connector for TROUBLE, [4] Velcro tape, [5] Screw (4x20 mm) x 2		

- Specifications and designs are subject to change without prior notice.
- These units are designed to detect an intruder and activate an alarm control panel.
  Being only a part of a complete system, we cannot accept responsibility for any damages or other consequences resulting from an intrusion.

OPTEX
Sensing Innovation

800.966.7839
sales@optexamerica.com
www.optexamerica.com

OPTEX
Sensing Innovation

Outdoor Boundary Detector

BX Shield Series

Quad-PIR sensors — 2 on each side
Up to 40ft detection per side, 80ft total
2 hardwired & 3 wireless models available

Where Flexible Performance Meets Modern Design

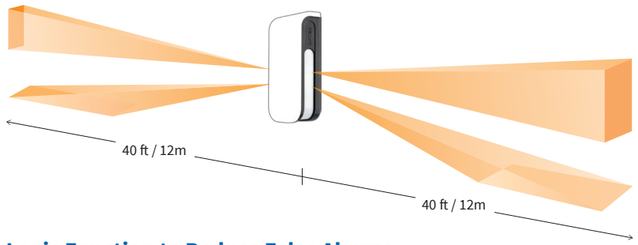
The BX Shield series (BXS) is a range of quad PIR sensors that are ideal for protecting windows and the immediate boundaries of a building or site. Combining great usability and versatile design, the BX Shield series includes four PIRs, two on each side of the unit. Detection range and sensitivity can be adjusted independently on each side of the sensor, up to 80ft total (40ft per side), for high-performing flexibility.

SHIELD: The New Shape of Security

4 PIR SENSORS, IR DIGITAL ANTI-MASKING AND SHIELD CONCEPT DESIGN

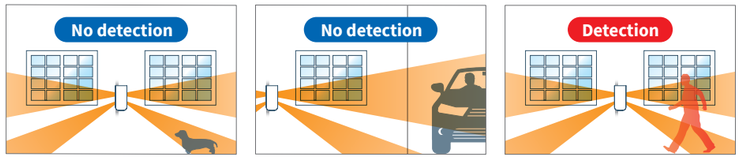
Reliable

40 ft / 12m on each side, long & narrow high sensitivity detection area



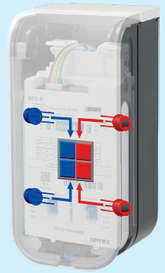
AND Logic Function to Reduce False Alarms

The BX SHIELD only triggers an alarm signal when both upper and lower detection areas detect movement.



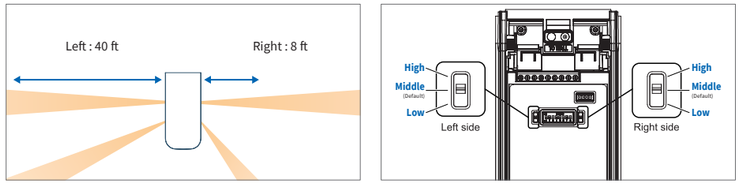
Quad-PIR Technology

The detection range, sensitivity, alarm output can be set separately for the left and right detection areas. The sensor can differentiate between large and small objects within the detection area, reducing false activations and ensuring genuine intruder detection.



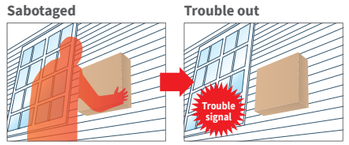
Individual Detection Area & Sensitivity Setting

Left and right detection ranges can be independently adjusted. (2.5 to 12 m in 5 steps)



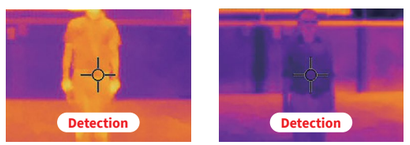
IR Digital Anti-Masking Function

Active IR anti-masking detects when the lens surface has been covered, blocked or painted.



Extreme High Detection Mode

For environments where the temperature difference between the human body and the background is very small, the extreme high detection mode increases the PIR sensitivity to avoid any missed alarm.



SENSITIVITY

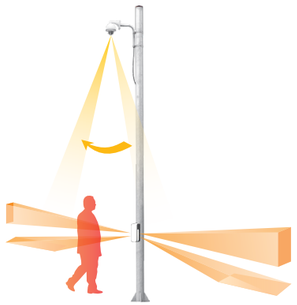
Normal			Extreme		
Normal Low	Normal Mid	Normal High	Extreme Low	Extreme Mid	Extreme High

SMDA (Super Multidimensional Analysis) Logic

All BX SHIELD models feature a digitally enhanced signal recognition logic called SMDA. By analyzing the detection patterns and environmental information SMDA can differentiate between a number of noise factors such as changes in weather conditions and vegetation sways; and genuine intrusions. This intelligent processing makes the sensors very reliable.

Individual Signal Outputs (Right & Left)

The BX SHIELD triggers independent alarm signals for the left and the right detection areas which is useful when connected to PTZ cameras.



Convenient

90 degrees rotation open
Easy to open / close cover

Level Indicator
The BX SHIELD series features a level indicator to ease the installation process.

Blue Touch™

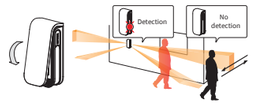
All accessible parts are colored in blue, making installation a friendlier procedure.

All components for the sensor's adjustment & settings are in blue.

Easy to adjust the detection area

Automatic Walk Test Mode

Walk test mode will time out after three minutes and the setting will return to "normal mode".



Secure

A Sense Of Security, Designed For You

Flat profile supported by an internal honeycomb structure ensures durability.

Optional color variations for a face cover can make installations less obvious.

Optical lens units are sealed and re-enforced to add extra strength.

Back Tamper

Trouble output activates when face cover, chassis as well as back box is removed.

Product Features

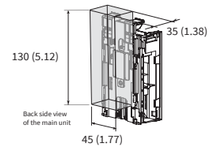
Battery Life For The Battery-Operated Models

Model	BXS-R		BXS-RAM	
Interval (sec.)	120	5	120	5
Approx.years	5	3.5	5	3.5
	3	2	3	2
	4	2.5	4	2.5

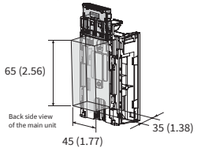
Battery type
CR123A (3 V DC, 1300 mAh)
CR2 (3 V DC, 750 mAh)
1/2 AA (3 V DC, 1000 mAh)

Calculations based on ; Single type battery, no power sharing with transmitter, LED OFF and Anti-masking ON.

Wireless transmitter and battery



Battery box BH-01 (option)



Battery box (BH-01)

*Battery not included.
CR123A x 3 (3.0 V DC)
CR2 x 3 (3.0 V DC)
1/2AA x 3 (3.6 V DC)
1/2AA x 6 (7.2 V DC x 3)*
*3.6 V DC 1/2 AA battery in series.

Eol Module Socket (BXS-ST, AM only)

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

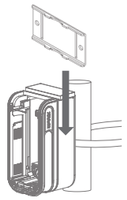
SHIELD Housing

IP55 protection
UV resistant ASA body

IP55

UV protection

Pole Mount Plate (option)



Suitable for a metal band up to 23 mm (1 inch) in width

Color Options

White Cover / White Body (Standard)

White Cover / Black Body (Optional)

Black Cover / Black Body (Optional)

Web based manual for wired models
http://navi.optex.net/manual/50155

Web based manual for battery operated models
http://navi.optex.net/manual/50157

Basic common features

- Double conductive shielding
- Sensitivity adjustment switch
- Cover tamper