



# PHOTOELECTRIC DETECTORS

OPTEX, INC.  
(USA)

13661 Benson Ave.



## AX-100S, AX-100SR INDOOR PHOTOELECTRIC DETECTION



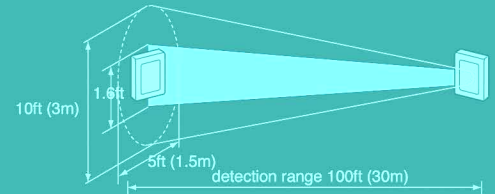
AX-100S

AX-100SR

### FEATURES

- AX-100S – surface mount model
- AX-100SR – flush mount model
- Multi-Focus Optics
- Crystal-oscillated dual-modulated pulsed beam technology
- LED alignment indicator

Model	AX-100S	AX-100SR
Maximum detection range	Indoor 100ft (30m)	
Maximum arrival range	395ft (120m)	
Interruption period	50m sec.	
Power supply	8 - 18V DC	
Current consumption (transmitter + receiver)	52mA (max.)	
LED alarm indicator	Transmitter: Red LED = transmitting condition Receiver: Red LED = alarm condition	
Alarm period	2 sec. (±1)	
Alarm output	N.C. 28V DC 0.2A max.	
Tamper switch	Opens when cover removed: 30V DC 0.1A max.	
Operating temperature	-4°F to 122°F (-20°C to +50°C)	
Operating humidity	95% max.	
Alignment angle	±90° Horizontal	±15° Horizontal
Mounting	Wall/switch box (surface)	Wall/switch box (flush)
Weight (trans+receiver)	8.5oz	5.6oz
Dimensions (H x W x D)	4.7in x 2.8in x 2in	4.5in x 2.8in x 1.5in



## BX-100PLUS IMMEDIATE PERIMETER PROTECTION



### FEATURES

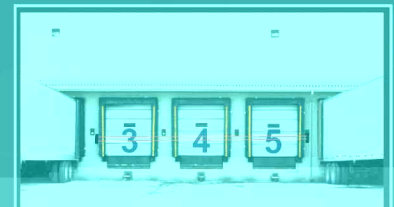
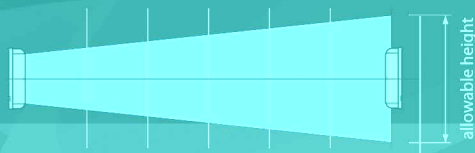
- 100ft detection range
- Dual IR pulsed beam system
- Internal sounder
- Easy alignment with visual and audible indicator
- Light Reduction Filter
- 99% beam blocking stability
- N.O. and N.C. relay outputs
- Active Infrared Technology
- Slim design

### OPTIONS

- SP-1 : Spacer unit
- MG-1 : Vandal and tamper resistant metal guard
- WC-1 : White decorative cover

Model	BX-100PLUS
Maximum detection range	100ft (30m)
Maximum arrival range	1000ft (300m)
Interruption period	50 msec.
Power supply	10.5 - 28V DC
Current consumption (transmitter + receiver)	75mA (max.)
Alarm period	2 ± 1 sec. (delay)
Relay output	2 relay outputs N.O. and N.C. 28V DC 0.2A (max.) each
Beeping period	15 ± 1 sec. (delay)
Volume of audible alarm indicator	Approx. 70dB (at 1 meter distance)
Tamper switch	N.C. opens when cover is removed
Operating temperature	-31°F to 131°F (-35°C to +55°C)
Environmental humidity	95% max.
Alignment angle	± 92° Horizontal
Mounting	Wall
Weight (transmitter+receiver)	14oz (400g)
Dimensions (H x W x D)	9.08in x 2.03in x 2.4in
Weatherproof	IP54

detection range	16ft	32ft	50ft	66ft	82ft	100ft
allowable height	12in	16in	20in	20in	20in	20in



(4 Channel Selectable Beam Frequencies)

## AX-70TN, AX-130TN, AX-200TN / AX-100TF, AX-200TF SHORT RANGE PERIMETER PROTECTION

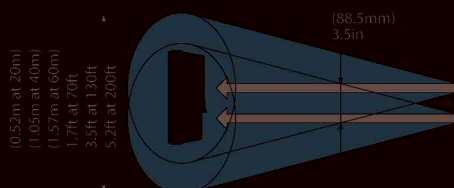


### FEATURES

- 70ft, 130ft and 200ft detection ranges (TN)
- 100ft and 200ft detection ranges (TF)
- Selectable 4 channel beam frequencies for stacking applications (TF)
- 4 step LED indicator
- Environmental disqualification circuit (TF)
- IP65 structure
- Lightning and surge protection
- Anti frost hood cover
- 99% beam blocking stability
- A.G.C. circuit
- Adjustable interruption time

### Accessories

- HU-3: Heating Unit 24V DC/AC, 420mA max.
- BC-3: Back Cover
- PSC-3: Pole Side Cover to install 2 AX to 1 pole



Model	AX-70TN	AX-130TN	AX-200TN	AX-100TF	AX-200TF
Max. detection range	70ft (20m)	130ft (40m)	200ft (60m)	100ft (30m)	200ft (60m)
Max. arrival range	700ft (200m)	1300 (400m)	2000 (600m)	1000ft (300m)	2000ft (600m)
Selectable beam freq.				4 channel	4 channel
Interruption period	Select. between 50, 100, 250, and 500 msec.				
Power supply	10.5 - 28V DC				
Current consumption (transmitter + receiver)	38mA (max.)	41mA (max.)	45mA (max.)	44mA (max.)	48mA (max.)
Alarm period	2 sec. (±1) nominal				
Alarm output	N.C. 28V DC 0.2A max.			N.C./N.O. 28V DC 0.2A max.	
Tamper switch	N.C. opens when cover is removed at 28V DC, 0.2A max.				
Operating temperature	-31F° to +140°F (-35°C to +60°C) Use optional heating unit (HU-3) when temp. drops below -13°F (-25°C.)				
Environmental humidity	95% max.				
Alignment angle	+90° Horizontal, ±5° Vertical				
Mounting	Wall and pole mounting				
Weight (trans. + receiver)	11lb, 7oz (650g)			24.7oz (700g)	
Dimensions (H x W x D)	6.7in x 2.6in x 2.7in				
Weatherproof	IP65				



## AX-250PLUS, AX-500PLUS / AX-350TF, AX-650TF MID TO LONG RANGE PERIMETER PROTECTION



### FEATURES

- 250ft and 500ft detection ranges (PLUS)
- 350ft and 650ft detection ranges (TF)
- Selectable 4 channel beam frequencies for stacking applications (TF Models)
- Environmental disqualification circuit (TF Models)
- Lightning and surge protection
- Anti frost hood cover

### Accessories

Model	AX-250PLUS	AX-500PLUS	AX-350TF	AX-650TF
Max. detection range	250ft (75m)	500ft (150m)	350ft (100m)	650ft (200m)
Max. arrival range	2500ft (750m)	5000ft (1500m)	3500ft (1000m)	6500ft (2000m)
Selectable beam freq.	4 channel			
Interruption period	Selectable 50, 100, 200, 350 and 500 msec.			
Power supply	10.5 - 30V DC			
Current consumption (transmitter + receiver)	50mA (max.)		60mA(max.) normal 78mA(max.) optical	62mA(max.) normal 80mA(max.) optical
Alarm period	2 sec. (±1) nominal			



# AX-100TFR, AX-200TFR / AX-100TFRi, AX-200TFRi WIRELESS-READY / WIRELESS PERIMETER PROTECTION



## FEATURES

- iSeries version includes Inovonics EN1941 transmitter and batteries pre-assembled in the units
- Wireless-Ready version works w/ most manufacturers wireless systems
- 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-100TFR	AX-200TFR
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	810 $\mu$ A T:490 $\mu$ A + R:320 $\mu$ A (at 25°C, 3.6VDC) 620 $\mu$ A T:300 $\mu$ A + R:320 $\mu$ A (at 25°C, 3.6VDC)	
Battery life	5 yrs	Trans. 3 yrs Rec. 5 yrs
Alarm output	Form C-Solid State Switch : 3.6VDC, 0.01A	
Alarm period	2 sec ( $\pm$ 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°F + 140°F (-20°C - +60°C)	
Envir. humidity	95%(Max.)	
Alignment angle	$\pm$ 90° Horizontal, $\pm$ 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	

## AX-TW200, AX-TW200M FULL CUSTOMIZABLE PRE-ASSEMBLED WIRELESS PERIMETER PROTECTION FOR AX-SERIES CUSTOMERS

### AX-TW200M

