



PHOTOELECTRIC DETECTOR

# AX-250/500PLUS



## **Innovative Design Meets Unsurpassed Quality in the AX-250/500PLUS**

**The Photoelectric Beams of OPTEX's AX-250/500PLUS Series combine precise detection capability with increased reliability providing superior outdoor detection.**

A dual beam design incorporates synchronized pulsed signals, and an adjustable beam interruption time can virtually eliminate unwanted activation. A high level of detection accuracy will be maintained, no matter how harsh the environment.

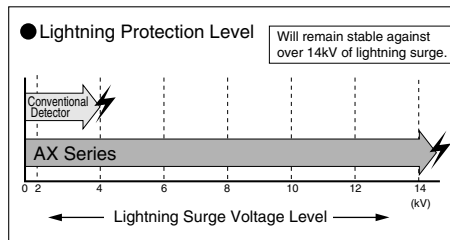
The AX-250/500PLUS will automatically compensate for changes in the surrounding conditions. The advanced mechanical design allows for easy installation and set-up providing long-term reliability, ideal for today's outdoor security systems.

# PHOTOELECTRIC DETECTOR AX-250/500PLUS

## FEATURES

### Lightning & Surge Protection

An improved EMI surge absorber and high surge resistiveness relay will maintain stable operation even in the most lightning prone areas.

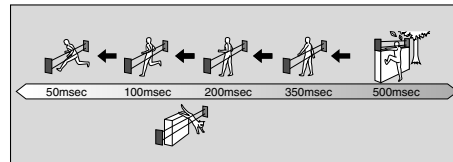


### A.G.C. (Automatic Gain Control) Circuit

The A.G.C. Circuit continually monitors for gradual changes in the signal's strength caused by changing weather conditions. It adjusts the sensitivity accordingly to maintain the proper signal level for the current environmental conditions.

### Adjustable Beam Interruption Period

Beam interruption time can be adjusted according to the peculiarities of each installation site. When protecting a wall or fence, a long interruption time will catch intruders, but let jumping cats pass through. Adjustable from 50 to 500msec.



### Twin Synchronized Pulsed Beams Designed for Greater Stability

"And Gate" dual beams require simultaneous interruption of both beams to trigger an activation. No activation is generated when a bird or falling leaves break just one beam.

### 99% Beam Blocking Rate

Stable operation is maintained with as much as 99% of the beam's energy blocked by heavy rain, dust storms, snow or fog.

### Anti-Frost Design

### Stainless Steel Screws & Back Plate

### Knock-Outs for 1/2 Inch Conduit

### Form C Relay Providing More Flexibility

### Reliability Chart for Outdoor Protection

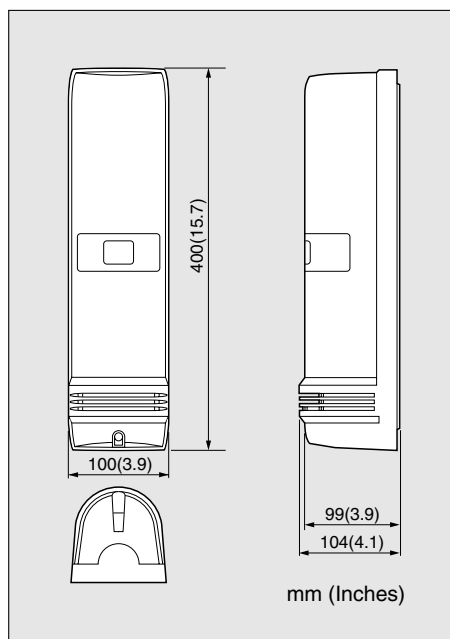
Specially designed to eliminate various causes of outdoor false alarms.

False Alarm Causes	Technology to Solve	AX Function & Features
Lightning & High EMI Disturbances	High EMI Resistance	High Surge Resistiveness Relay & EMI Surge Absorber
Insect Entering into Housing	Sealed Enclosure Housing	IP54
Dew Condensation Fog, Frost & Heavy Rain	High Sensitivity Tolerance Excellent Optical Alignment Environmental Analysis	Ultra High Power Transmitter Anti-Frost Mechanism Easy Optical Alignment Mechanism Automatic Gain Control
Birds or Flying Objects	Size Analysis	Twin Synchronized Pulsed Beams

## SPECIFICATIONS

MODEL	AX-250PLUS	AX-500PLUS
Detection Method	Infrared Photoelectric	
Range (Outdoor)	75m (250ft.)	150m (500ft.)
Maximum Arrival Distance	750m (2500ft.)	1500m (5000ft.)
Beam Characteristics	Pulsed Infrared	
Interruption Period	50~500msec ( Selectable )	
Power Input	10.5~30V DC	
Current Draw (transmitter+receiver)	Normal operation 50 mA max	
Alarm Period	2sec ( ±1 ) nominal	
Alarm Output	Form C Relay ( 28V DC 0.2A max )	
Tamper Switch	N.C. opens when cover is removed (Receiver Only)	
Operating Temperature	-25°C ~ +55°C (-13°F ~ +131°F)	
Environment Humidity	95% Max	
Alignment Angle	±10° Vertical, ±90° Horizontal	
Mounting	Wall or Pole	
Weight	2700g ( 95.2 oz ) (Both Transmitter and Receiver)	

## DIMENSIONS



## OPTIONS

### HU-1 : Heating Unit

For use in cold areas. 24V DC/AC, 430mA max.



### BC-1 : Back Cover



UL LISTED : AX-250PLUS, AX-500PLUS

\* Specifications and design are subject to change without prior notice.  
NOTE: This unit is designed to detect an intruder and activate an alarm control panel. Being only a part of a complete system, we cannot assume responsibility for theft or damages, should it occur.



"Take Care of the Environment"  
This catalogue uses recycled paper



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