

# PHOTOELECTRIC BEAM SENSOR



(TWIN BEAM)

**PB-100TK(K)**



Outdoor 330 ft. (100m)  
Indoor 660 ft. (200m)



Patent pending : 1  
Utility model registered : 1  
Utility model pending : 1  
Design registered : 1



Pole mount

## ***The TAKEX "TWIN"***

*photoelectric beam is designed to meet the highest standards of quality and reliability for photoelectric beam intrusion detection.*

*Unique twin beams are synchronized to work together to reinforce the range and stability in severe weather conditions.*

*The system has a rotary optical system for easy installation and the special lens design aids in proper alignment.*

### HIGH RELIABILITY

Synchronized twin beams reduce false alarms caused by flying birds and falling leaves.

### EXTERNAL LIGHT PROTECTION

Trouble-free condition in 50,000 Ix illumination fluctuation is assured by external light compensation circuit a filter, specially designed, that cuts visible rays effectively. Excellent tolerance against sun light, automobile head light, fluorescent light or mercury light.

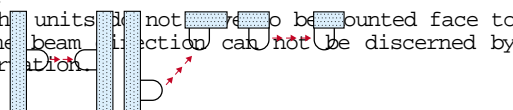
### EASY BEAM ALIGNMENT

The special view finder allows for fast aiming and assures good alignment. Equipped with monitor jack to check sensitivity.

### ROTARY OPTICAL SYSTEM

The optical system of both the transmitter and receiver can be rotated a full 180° which allows for side aiming.

Therefore the units do not need to be mounted face to face and the beam direction can not be discerned by simple observation.



### INSECT PROTECTION

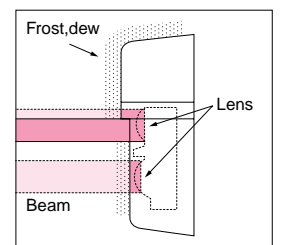
A sealed optical system prevents intrusion and interference by insects.

### OTHER FEATURES

- \*Automatic Gain Control circuit loaded
- \*Wide adjustment (horizontally ±90°, vertically ±10°)

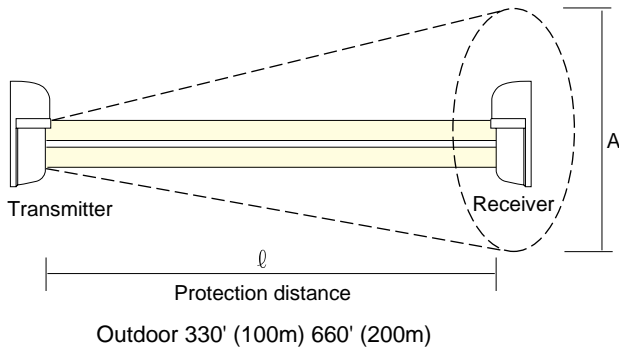
### PROTECTION AGAINST FROST/DEW

As a special hood is attached on sensor cover, beam protection continues without interruption even when the cover is screened by frost or dew.

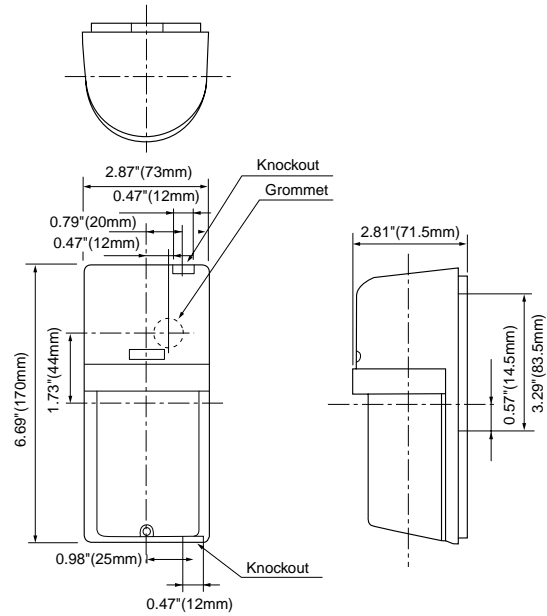


# PHOTOELECTRIC BEAM SENSOR

## COVERAGE

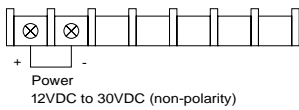


## EXTERNAL DIMENSIONS [ Unit : inch(mm) ]

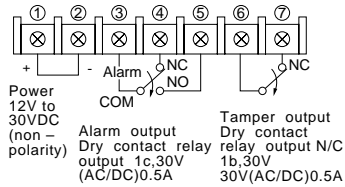


## TERMINAL ARRANGEMENT

[Transmitter]



[Receiver]



## SPECIFICATIONS

Product name	PHOTO ELECTRIC BEAM SENSOR
Model	PB-100TK(K)
Detection system	Simultaneous breaking of 2 beams
Infrared beam	LED pulsed beam, Double modulation
Protection distance	Outdoor 330' (100m) or less Indoor 660' (200m) or less
Max. beam range (Approximation)	Outdoor 3300' (1000m) Indoor 3300' (1000m)
Response time	50msec. to 700msec. (Variable at pot)
Supply voltage	10V to 30VDC (Non-polarity)
Current consumption	80mA or less
time Alarm output	Dry contact relay output form C Contact action : Interruption time +delay (1 to 3 sec.) Contact capacity : 30V AC/DC, 0.5A or less
Tamper output	Dry contact relay N/C Action : Activated when cover is detached Contact capacity : 30V AC/DC, 0.5A or less
Alarm LED	Red LED (Receiver) ON : when an alarm is initiated
Attenuation LED	Red LED (Receiver) ON : when an alarm is initiated
Functions	Monitor jack output, AGC circuit, Frost proo cover
Ambient Temperature range	-13 ℉ to +140 ℉ (-25 ℃ to +60 ℃)
Mounting positions	Indoor / Outdoor
Wiring	Terminals

The specifications are subject to change without notice.

## OPTIONAL

- Pole  
KP-100  
(100cm, 2pcs./set)  
KP-150  
(150cm, 2pcs./set)



- Pole cover (2pcs./set)  
BP-60TE  
(pole cap,  
screw included)



- Housing case  
KH-120



- Pole attachment (2pcs./set)  
BP-60A



Please Note: This sensor is designed to detect intrusion and to initiate an alarm; it is not a burglary or a crime preventing device. TAKEX is not responsible for damage, injury or losses caused by accident, theft, Acts of God (including inductive surge by lightning), abuse, misuse, abnormal usage, faulty