

# PHOTOELECTRIC BEAM SENSOR

**PB-30TK(K)**

Outdoor : 30m (100ft.)  
Indoor : 60m (200ft.)

**PB-60TK(K)**

Outdoor : 60m (200ft.)  
Indoor : 120m (400ft.)

**PB-100TK(K)**

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



## 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 birds flying by or by falling leaves.

### EXTERNAL LIGHT PROTECTION

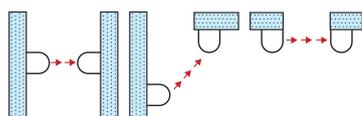
Trouble-free conditions in the 50,000lx illumination fluctuation is assured by an external light compensation circuit filter, specially designed, that cuts visible rays effectively. Excellent tolerance to sunlight, automobile headlights, fluorescent light, and mercury light.

### EASY BEAM ALIGNMENT

The special viewfinder enables for fast aiming and assures good alignment. Equipped with a monitor jack to check sensitivity.

### ROTARY OPTICAL SYSTEM

The optical system of both transmitter and receiver can be rotated 180° which enables side aiming. The units therefore do not have to be mounted face to face and the beam direction cannot be discerned by simple observation.

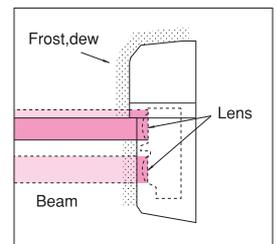


### INSECT PROTECTION

A sealed optical system prevents intrusion and interference by insects.

### PROTECTION AGAINST FROST/DEW

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



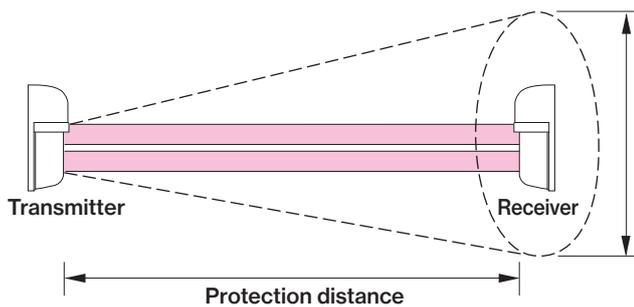
### OTHER FEATURES

- \*Automatic Gain Control circuit loaded
- \* Wide adjustment (horizontally  $\pm 90^\circ$ , vertically  $\pm 10^\circ$ )

# PHOTOELECTRIC BEAM SENSOR

## ■ PATTERN

[Unit : m (ft)]

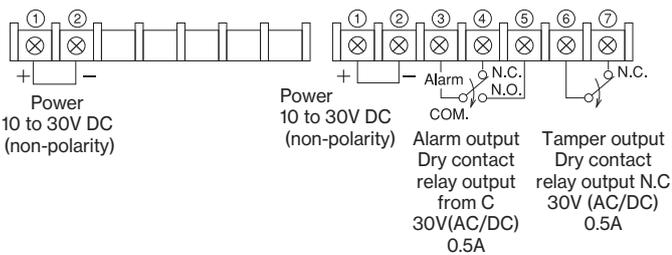


PB-30TK	Outdoor	30m (100ft.)
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	Indoor	200m (660ft.)

## ■ TERMINAL ARRANGEMENT

[Transmitter]

[Receiver]



## ■ OPTIONAL ACCESSORIES

### ● Pole

**<KP-100>**  
 2pcs./set  
 100cm (39")

**<KP-150>**  
 2pcs./set  
 150cm (59")



### ● Pole cover

**<BP-60TE>**  
 2pcs./set  
 pole cap, screw, included



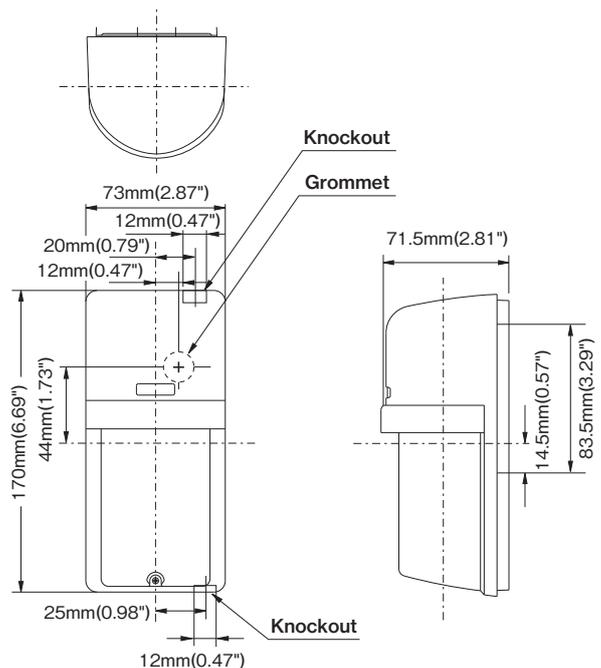
### ● Pole attachment

**<BP-60A>**  
 2pcs./set



## ■ EXTERNAL DIMENSIONS

[Unit : mm (inch)]



## ■ SPECIFICATIONS

Product name	PHOTOELECTRIC BEAM SENSOR		
Model	PB-30TK	PB-60TK	PB-100TK
Detection system	Simultaneous breaking, of 2 beams		
Infrared beam	LED pulsed beam, Double modulation		
Protection distance	Outdoor	30m(100')	60m(200')
	Indoor	60m(200')	120m(400')
Max. beam range	Outdoor	300m(1000')	600m(2000')
	Indoor	300m(1000')	600m(2000')
Response time	50msec to 700msec (Variable at pot)		
Supply voltage	10 to 30VDC (Non-polarity)		
Current consumption	53mA Max.	80mA Max.	
Alarm output	Dry contact rery form C Contact action : Interruption time + delay time (1 to 3 sec.) Contact capacity : 30V AC/DC, 0.5A Max.		
Tamper output	Dry contact rery N.C. Action : Activated when cover is detached Contact capacity : 30V AC/DC, 0.5A Max.		
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 proof cover		
Ambient temperature range	-25°C to +60°C (-13°F to +140°F)		
Mounting position	Indoor / Outdoor		
Wiring	Terminals		
Weight	Transmitter : 1380g(33oz), Receiver : 400g(14oz)		
Appearance	PC resin (wine red)		

\* The specifications are subject to change without notice.

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 installation or improper maintenance.

# TAKEX

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