

# PHOTOELECTRIC BEAM SENSOR

## Twin Beam

**PB-30TK** Outdoor 90ft (30m) / Indoor 180ft (60m)

**PB-60TK** Outdoor 180ft (60m) / Indoor 360ft (120m)

**PB-100TK** Outdoor 330ft (100m) / Indoor 660ft (200m)



Pole Mountable  
on 38-45mm  
diameter poles



# TAKEX®

The TAKEX 'TWIN' photoelectric beam is designed to meet the highest quality and reliability standards in photoelectric beam intrusion detection. Unique twin beams are synchronised in order to reinforce the range and stability in severe weather conditions. The system has a rotary optical system for easy installation and a special lens design for accurate alignment.

## Features

### • HIGH RELIABILITY

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

### • EXTERNAL LIGHT PROTECTION

Trouble-free condition in 50.000 lux illumination fluctuation is assured by an external light compensation filter circuit. Excellent tolerance against sunlight, headlights, fluorescent or mercury light.

### • EASY BEAM ALIGNMENT

The special viewfinder allows 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 up to 180° which allows side aiming. Therefore the units do not have to be mounted face-to-face and the beam direction cannot be discerned by simple observation.

### • INSECT PROTECTION

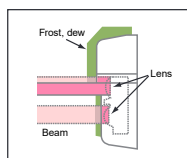
A sealed optical system prevents intrusion and interference by insects.

### • OTHER FEATURES

- Automatic Gain Control circuit loaded
- Wide adjustment (horizontally  $\pm 90^\circ$ , vertical  $\pm 10^\circ$ )
- Pole mounting kit included

### • 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.



# Specifications

Model	<b>Photoelectric Beam Sensor (Intelligent Twin Series/Twin Beams)</b>		
Model Number	PB-30TK	PB-60TK	PB-100TK
Detection System	Simultaneous breaking of 2 beams		
Infrared Beam	LED pulsed beam, Double modulation		
Protection Distance	Outdoor 90' (30m) or less Indoor 180' (60m) or less	Outdoor 180' (60m) or less Indoor 360' (120m) or less	Outdoor 330' (100m) or less Indoor 660' (200m) or less
Max. Beam Range	Outdoor 900' (300m) Indoor 900' (300m)	Outdoor 1800' (600m) Indoor 1800' (600m)	Outdoor 3300' (1000m) Indoor 3300' (1000m)
Response Time	50msec. to 700msec. (Variable at pot)		
Supply Voltage	12V to 30VDC (Non-polarity)		
Current Consumption (per set)	60mA or less	80mA or less	80mA or less
Alarm Output	Dry contact relay output form C Contact action : Interruption time + delay time (1 to 3 sec.) Contact capacity : 30V (AC/DC) 0.5A or less		
Tamper Output	Dry contact relay output 1b (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 beam is attenuated.		
Frequency Changeover	No	No	No
Ambient Temperature Range	- 13°F to +140°F (-25°C to +60°C)		
Mounting Positions	Indoor/Outdoor		
Wiring	Terminals		
Weight	Transmitter : 13.3oz (380g) / Receiver : 14.0oz (400g)		
Appearance	Wine red (PC resin)		

Due to ongoing product improvements, specifications may change without notice.

## Coverage



PB-30TK	Outdoor	90' (30m)
	Indoor	180' (60m)
PB-60TK	Outdoor	180' (60m)
	Indoor	360' (120m)
PB-100TK	Outdoor	330' (100m)
	Indoor	660' (200m)

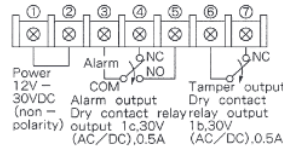
## Terminal Arrangement

### [Transmitter]

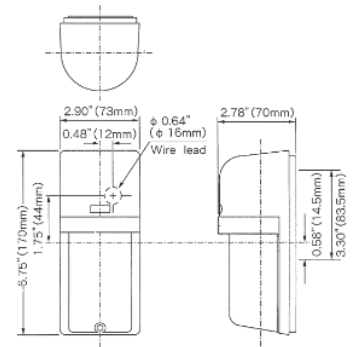


Power  
12DC to 30VDC (non - polarity)

### [Receiver]



## External Dimensions



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