

PHOTOELECTRIC BEAM SENSOR

Intelligent Twin Series

PB-20TE Outdoor 60ft (20m) / Indoor 120ft (40m)

PB-40TE Outdoor 120ft (40m) / Indoor 240ft (80m)

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



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**

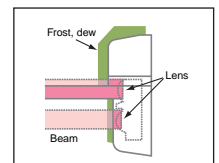
- Automatic Gain Control circuit loaded
- Wide adjustment (horizontally $\pm 90^\circ$, vertical $\pm 10^\circ$)
- Pole mounting kit included

- **SELECTABLE FREQUENCIES**

The "INTELLIGENT TWIN" beams have 4 separate selectable frequencies for stacking up several sets without crosstalk.

- **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	Photoelectric Beam Sensor (Intelligent Twin Series/Twin Beams)		
Model Number	PB-20TE	PB-40TE	PB-60TE
Detection System	Simultaneous breaking of 2 beams		
Infrared Beam	LED pulsed beam, Double modulation		
Protection Distance	Outdoor 60' (20m) or less Indoor 120' (40m) or less	Outdoor 120' (40m) or less Indoor 240' (80m) or less	Outdoor 180' (60m) or less Indoor 360' (120m) or less
Max. Beam Range	Outdoor 600' (200m) Indoor 600' (200m)	Outdoor 1200' (400m) Indoor 1200' (400m)	Outdoor 1800' (600m) Indoor 1800' (600m)
Response Time	50msec. to 700msec. (Variable at pot)		
Supply Voltage	12V to 30VDC (Non-polarity)		
Current Consumption (per set)	55mA or less	75mA 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	Yes (4ch)		
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.

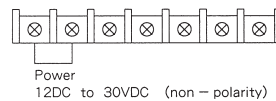
Coverage



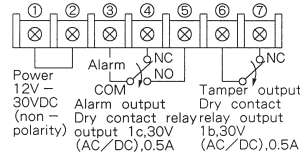
Model	Environment	Protection Distance
PB-20TE	Outdoor	60' (20m)
	Indoor	120' (40m)
PB-40TE	Outdoor	120' (40m)
	Indoor	240' (80m)
PB-60TE	Outdoor	180' (60m)
	Indoor	360' (120m)

Terminal Arrangement

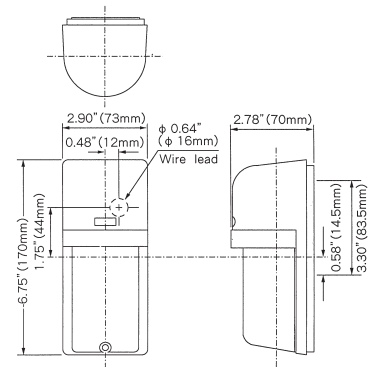
[Transmitter]



[Receiver]



External Dimensions



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