

# PHOTOELECTRIC BEAM SENSOR (SYNCHRO TWIN BEAM)

CE  PB-100ST: Outdoor 330 ft. (100m)



Patent pending : 1  
Utility model registered: 2  
Design registered : 1

POLE COVERS SOLD SEPARATELY

The TAKEX "SYNCHRO 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 systems has a rotary optical system for easy installation and the special optical mirror 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 lx 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.

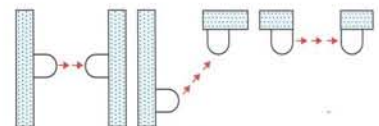
**EASY BEAM ALIGNMENT**

The special view finder allows for fast aiming and assures good alignment. Equipped with monitor jack to check sensitivity. Also there is a sensitivity attenuation LED and monitor jack output.

**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 have to be mounted face to face and the beam direction can not be discerned by simple observation.



**INSECT PROTECTION**

An unique rubber grommet prevents insects from entering through the wiring hole.

**OTHER FEATURES**

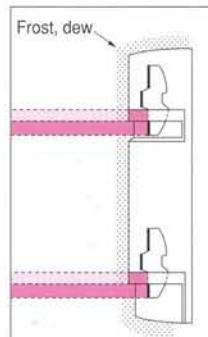
- \* Automatic Gain Control circuit loaded
- \* Wide adjustment (horizontally ±90°, vertically ±10°)
- \* Tamper output for high security. (Receiver)
- \* Polycarbonate cover excellent at anti-shock

**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.

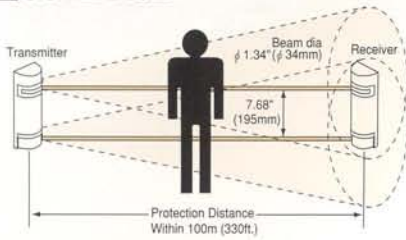


Application

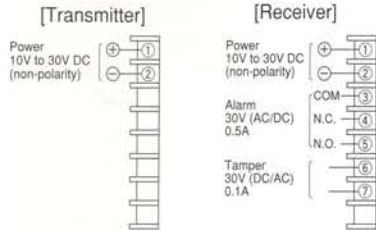


# PHOTOELECTRIC BEAM SENSOR

## COVERAGE



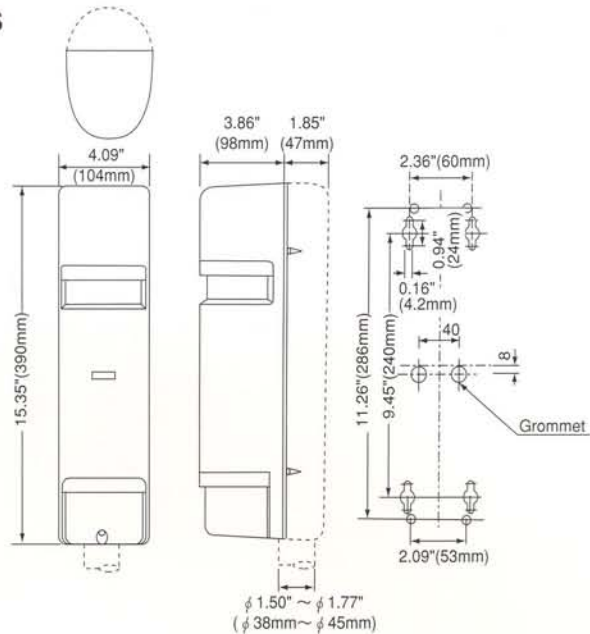
## TERMINAL ARRANGEMENT



## OPTIONAL

- Pole  
KP-100(100cm, 2pcs./set)  
KP-150(150cm, 2pcs./set)
- Pole cover  
BP-200F(2pcs./set)
- Housing case  
KH-120(1pce.)
- Flush mount attachment  
BU-50F(1pce.)  
(with stainless plate)
- Heater(2pcs./set)  
HTF-100(100VAC·200mA/set)  
HTF-24(24VDC·860mA/set)  
(Temperature control switch)
- Pole side cover  
BS-50F(1pce.)

## EXTERNAL DIMENSIONS



## SPECIFICATIONS

The specifications are subject to change without notice.

Name	Photoelectric Beam Sensor
Model	PB-100ST
Detection system	Simultaneous breaking of 2 beams
Infrared beam	LED pulsed beam, Double modulation
Protection distance	Outdoor 330ft. (100m)
Max. beam range	3300ft. (1000m)
Response time	50msec. to 700msec. (Variable at pot)
Supply voltage	10V to 30V DC (Non-polarity)
Current consumption	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 N/C Action : Activated when cover is detached Contact capacity : 30V (AC/DC) 0.1A or less
Alarm LED	Red LED (Receiver) On : when an alarm is initiated
Attenuation LED	Red LED (Receiver) On : when beam is attenuated
Functions	Monitor jack output, AGC circuit, Frost proof cover
Ambient Temperature range	-13° F to +140° F (-25° C to +60° C)
Mounting positions	Outdoor
Wiring	Terminals
Weight	Transmitter/Receiver : 42oz (1200g) each
Appearance	PC resin (wine red)

Please Note: This sensor is designed to detect intrusion and to initiate an alarm; it is not a burglary-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.

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