# PHOTOELECTRIC BEAM SENSOR

4-Stacked synchronised beam

**PB-50F** Outdoor 165ft (50m)

**PB-100F** Outdoor 330ft (100m)

**PB-200F** Outdoor 660ft (200m)







The expert in outdoor protection 4-stacked synchronised beam sensor for long range use.

## **Features**

#### • 4-STACKED HIGH POWERED BEAM (Patent)

Double modulation frequency and phased locked loop system offers high power beams that have tenfold maximum arrival distance and a hundredfold maximum sensitivity.

- Excellent tolerance for bad weather (Fog, snow or heavy rain etc.).
- Anti-external light circuit provides excellent tolerance for sunlight, mercury light and fluorescent light.
- Since simultaneous breaking of 4 beams is required to initiate an alarm, the most common causes of false alarms (small animals, birds and falling leaves) are virtually eliminated.

#### BEAM LEVEL INDICATION FOR BEAM ALIGNMENT

- Sound check function (Utility model) incorporates speakers in the receiver. Sound volume is set to be maximum at the peak of received beam. You can confirm visual and audible beam alignment.
- Attenuation LED lights up and informs you of low sensitivity condition when the beam attenuates under a certain level. Convenient for sensitivity check after cover attached.
- Monitor jack to check if beam level is optimal for beam alignment use.

### • INSECT PROTECTION

A sealed optical system prevents interference by insects.

## • EXCELLENT NOISE, RFI IMMUNITY

Special noise eliminator system provides excellent RFI and electrical induction noise immunity.

#### • POLE MOUNTING/WALL MOUNTING AVAILABLE

The unit can be mounted back to back on pole and the protection line can be set at the same height (Utility model).

- Wide adjustable range of beam alignment (Horizontally ±90°C, Vertically ±10°C).
- Optional accessories available (Heater, housing, rear cover etc.).
- Tamper output.
- Polycarbonate cover provides excellent shock-proof.

## PROTECTION AGAINST FROST, DEW AND FOG (Utility model)

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

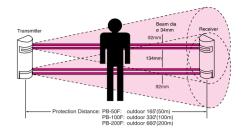
# **Specifications**

## Model Photoelectric Beam Sensor (4-stacked synchronised beam)

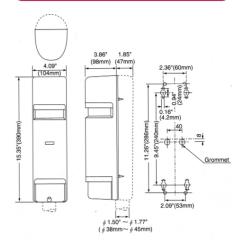
			<u>, , , , , , , , , , , , , , , , , , , </u>	
Model Number	PB-50F	PB-100F	PB-200F	
Maximum Beam Range	1650' (500m)	3300' (1000m)	6600' (2000m)	
Protection Distance	165' (50m)	330' (100m)	660' (200m)	
	or less	or less	or less	
Infrared Beam	Wave length 9400 Å	Wave length 8900 Å		
	Double modulation	Double modulation		
	(500Hz to 20KHz)	(500Hz t	o 20KHz)	
Light Source	LED	(Pulsed beam by LED)		
Response Time	50msec			
Alarm Signal	Dry contact relay output form C			
	Contact action: Interruption time + Delay time (Approx. 1 sec.)			
	Contact capacity: 30V (AC/DC) up to 0.5A			
Supply Voltage	12V to 30V DC (non-polarity)			
Power Consumption	75mA or less (at 12V DC)			
Tamper Signal	Dry contact output 1b (N/C)			
	Contact cap	Contact capacity: 30V (AC/DC) up to 0.5A		
Functions	Sound check, Monitor jack,			
	Attenuation LED, Frost protection cover			
Ambient Temperature	-31°F to +151°F (-35°C to +66°C)			
Range				
Mounting Position	Outdoor (Periphery protection)			
Connection	Terminals			
Weight	TR./RE. 45.5oz (1.3kg) each			
Appearance	Wine red PC resin			

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

# Coverage



# External Dimensions



# Terminal Arrangement

#### [Transmitter] [Receiver] Power 10V to 30V DC 10V to 30V DC (non-polarity) (non-(+) polarity) Alarm С Dry contact relay output 1C, 30V (AC/DC) 0.5A NC Tamper Dry contact 1b 30V (AC/DC) 0.5A

# Optional

 Pole Cover BP-200F (2pcs/set)



 Pole Side Cover BS-50F (1pce)



• Flush mount attachment BU-50F (1pce) (with stainless plate)



• Heater (2pcs./set) HTF-24 (24VDC, 860mA/set) (Temperature control switch)



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



#### TAKEX Europe Ltd.

Aviary Court, Wade Road Basingstoke, Hants RG24 8PE, U.K.

Tel: 44 (1256) 475555 44 (1256) 466268 Fax: Email: sales@takexeurope.com Website: www.takexeurope.com