

# MINIATURISED PHOTOELECTRIC BEAM SENSOR

**PB-10NS** N/O & N/C contact: 33' (10m)

**PB-10TNS** N/O & N/C contact: 33' (10m)



# TAKEX<sup>®</sup>

Miniaturized Photoelectric Beam Sensor PB-10NS/PB-10TNS is designed to cover 33' (10m) distance and is usable in wide applications inconspicuously, e.g. CD/ATM machine, motor-driven shutter, window or alley.

## Features

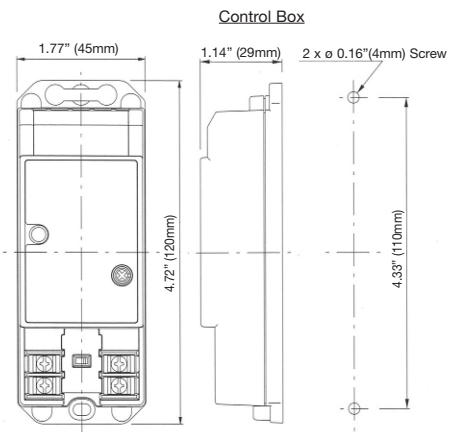
- **MINIATURISED CONTROL BOX**  
W: 1.77" (45mm) x H: 4.72" (120mm) x D: 1.14" (29mm)  
succeeded in reducing volume by 40% compared with our current amplifier to save installation space.
- **SENSOR CORD CAN BE CUT FREELY**  
Both the transmitter cord and receiver cord can be cut as the installation requires. No need to bundle the extra cord. (Cord: 33'(10m) Max.)
- **EASY INSTALLATION**  
For sensor head, make a preliminary hole 0.47" (ø12mm) to depth required. The diameter of the ring cover is 0.59" (ø15mm) allowing for ease of installation.
- **BUILT-IN SENSITIVITY VOLUME**  
Adjustable to the optimal sensitivity as the installation demands.
- **TWO MODELS AVAILABLE**  
NS - Single beam coverage.  
TNS - Twin beam coverage (and/or gated).
- **OTHER FEATURES**
  - High prevention against external light
  - Operation LED (Lights red at detection)

## Specifications

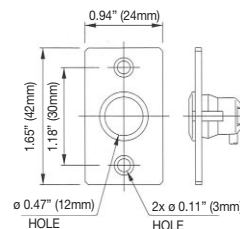
Model	Photoelectric Beam Sensor	
Model Number	PB-10NS	PB-10TNS
Detection System	Near Infrared Beam	
Detection Area	33' (10m)	
Supply Voltage	10V to 30V DC (non-polarity)	
Current Consumption	45mA or less	55mA or less
Alarm Output	Dry contact relay : 30V (AC/DC), 0.3A N/O, N/C selectable Contact action: Interruption time + Delay time (approx. 1 sec.)	
Response Time	Detect 100 msec. or more of beam interruption.	
Operation LED	Lights Red when detection (beam is interrupted)	
Ambient Temperature	-25°C to +55°C (-13°F to +131°F) without condensation or frozen	
Wiring	Terminals Sensor : PC resin	
External Appearance	Control box : ABS resin (white)	
Weight	Sensor: 120g (4.2oz) Control box: 95g (3.3oz)	

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

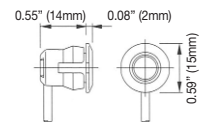
## External Dimensions mm/inch



Flush Mounting Plate



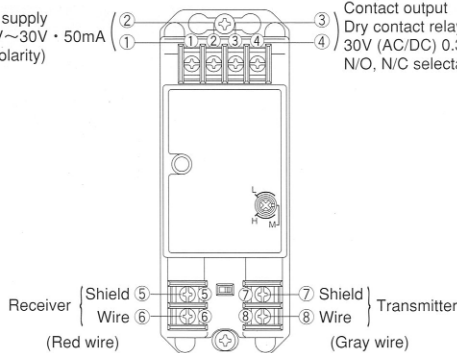
Sensor (Transmitter and Receiver)



## Terminal Arrangement

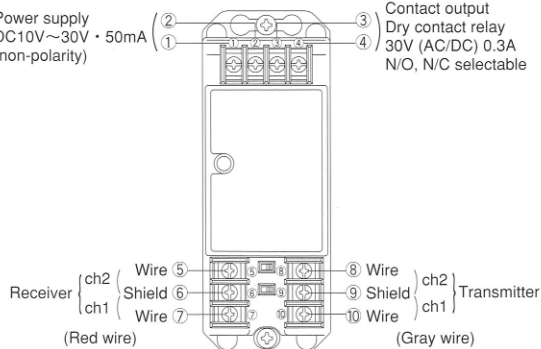
### •PB-10NS

Power supply DC10V~30V · 50mA (non-polarity)  
Contact output Dry contact relay 30V (AC/DC) 0.3A N/O, N/C selectable

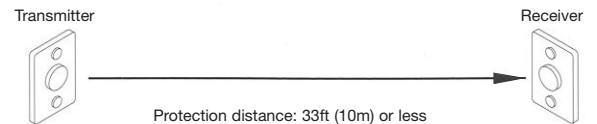


### •PB-10TNS

Power supply DC10V~30V · 50mA (non-polarity)  
Contact output Dry contact relay 30V (AC/DC) 0.3A N/O, N/C selectable



## Coverage (m/feet)



### •Sensitivity Adjustment

Adjust the sensitivity adjustment control depending on the protection distance.

Protection distance	Sensitivity Adjustment Volume
Less than 9.9' (3m)	M
More than 9.9' (3m)	H

Note: This sensor is designed to detect intrusion and to initiate an alarm. It is not a burglar-preventing device. TAKEX is not responsible for damages or losses caused by accidents, thefts, Acts of God (including inductive lightning), abuses, misuses, abnormal usages, faulty installation or improper maintenance.



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PB-10NS/TNS DS-10 04  
CRI-163