

LOW CURRENT PHOTOELECTRIC BEAM SENSOR

PXB-100SW



**This is extremely low current consumption Quad beam sensor
No wiring will be required with solar panel unit (BA-6SLA)**



DOUBLE MODULATION

Double modulated beams are designed to distinguish the external lights. It increases the reliability in the outdoor security system.



WIDE BEAM

The pitch between upper and lower beam is widened more than old models. False alarm by birds and falling leaves reduces drastically.



QUAD HIGH POWER BEAM

The beam power is 100 times of the minimum requirement. The beam distance is 10 times of the described specification. This high power beam also realizes the reliability against the harsh conditions like fog, snow, heavy rain.



LOW CURRENT CONSUMPTION

50% less than remaining models. The battery size may reduce, wiring diameter may lessen, installation cost may decrease.



ECOLOGY

RoHS adapted – Environment friendly. Free from Lead, Mercury, Cadmium, Hexavalent chromium, brominated biphenyl, Polybrominated diphenyl ether.



INSECT/WATER PREVENT

Anti-insect bushing and special gasket enable IP65 rated tight housing. Polybrominated biphenyl, Polybrominated diphenyl ether.



ANTI-BIRD SPIKE

Keeps birds and small animals away from the sensor, helping to reduce false alarms.



DRIP-PROOF HOUSING

Prevents rain and snow from streaming down the front side of housing, helping to avoid false alarm.



DUAL RING SIGHT

Enables better and clear view for easy beam alignment.



TARGET COLOR

The vivid color of the internal structure can be recognized easily from the far end in the beam alignment procedure. The color differs between a transmitter and a receiver which helps easy installation and checking.



INCREASED ANGLE ADJUSTMENT ALLOWANCE

Vertically $\pm 20^\circ$ compared with previous version. It may adapt to the slope installation flexibly.



SOLAR BATTERY CORRESPONDENCE

It can be used with solar battery unit in a site without a power supply. It becomes possible to install without wiring work.



WIRELESS ALIGNMENT CHECKER

Enables easy and accurate beam alignment. (Sold separately)

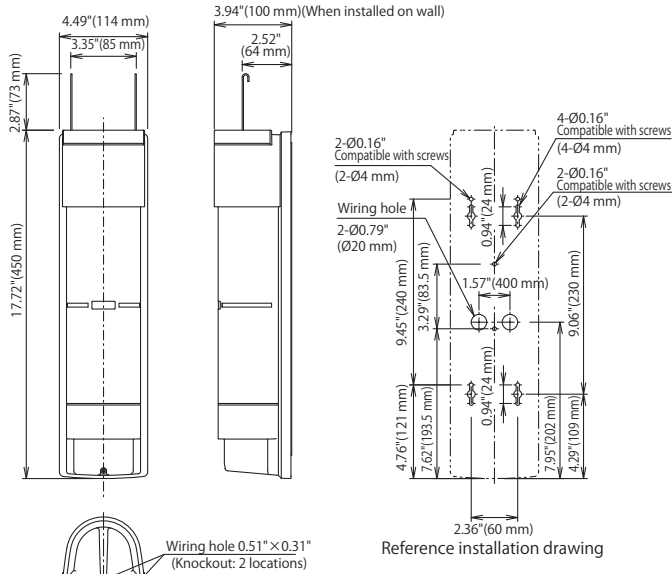


LIGHTNING PROTECTION

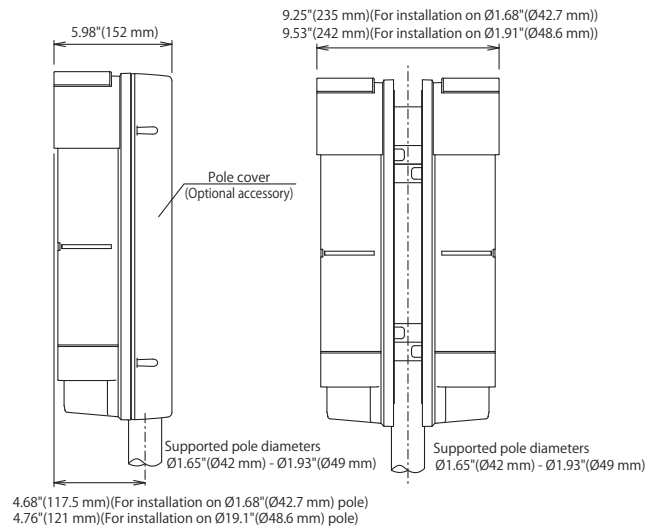
Minimize the damage by the induced surge through wirings. It may stand 10000V under normal mode, 15000V under common mode.

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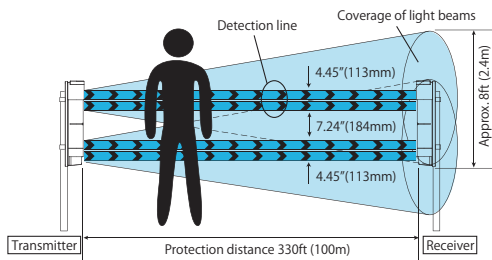
EXTERNAL DIMENSIONS Unit: inch (mm)



Pole installation dimensional drawing

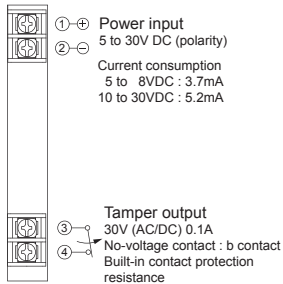


BEAM SPREAD RANGE

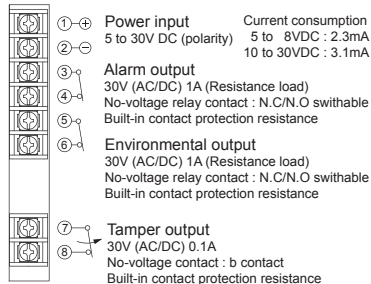


端子配列図

[TRANSMITTER]



[RECEIVER]



WIRING DISTANCE BETWEEN SENSOR AND POWER SUPPLR

wire size \ voltage	DC6V	DC12V	DC24V
AWG 20 (Dia. 0.8mm)	2100ft. (640m)	12500ft. (3810m)	34000ft. (10400m)
AWG 18 (Dia. 1.0mm)	3300ft. (1000m)	20000ft. (6000m)	53000ft. (16000m)
AWG 17 (Dia. 1.1mm)	4000ft. (1200m)	23500ft. (7160m)	26500ft. (19800m)
AWG 16 (Dia. 1.25 mm)	5100ft. (1550m)	30500ft. (9300m)	84000ft. (25600m)
AWG 15 (Dia. 1.4mm)	6400ft. (1950m)	38000ft. (11600m)	105000ft. (32000m)
AWG 14 (Dia. 1.6mm)	8400ft. (2560m)	50000ft. (15200m)	135000ft. (40000m)

※When 2 or more units are connected, the wiring distance is calculated as follows :
[Above value/number of units]

SPECIFICATIONS

Model	PXB-100SW	
Detection system	Near infrared pulsed beam interruption system (TR-RE 4 beam simultaneous interruption)	
Infrared beam	Double modulation pulsed beam by LED	
Protection distance	Outdoor 330' (100 m) or less	
Max. arrival distance	3300' (1000 m)	
Response time	0.05 sec. to 0.7 sec. (Variable at pot)	
Power supply	5 to 12VDC (polarity)	
Current consumption ※1 (During armed) ※2 (During beam alignment)	5 to 8VDC	10 to 30VDC
	Transmitter Max : 3.7mA ※1 Max : 8.2mA ※2	Transmitter Max : 5.2mA ※1 Max : 9.4mA ※2
	Receiver Max : 2.3mA ※1 Max : 10.0mA ※2	Receiver Max : 3.1mA ※1 Max : 10.7mA ※2
Alarm output	Dry contact relay output form N.C/N.O swithable Contact action : Interruption time (Min.2sec.) Contact capacity : 30V (AC/DC) 1A (resistive load) Protective resistor	
Environmental output	Dry contact relay output form N.C/N.O swithable Action : Activated when weather condition gets worse Contact capacity : 30V (AC/DC) 1A (resistive load) Protective resistor	
Tamper output	Dry contact relay (N.C.) Action : Activated when cover is detached Contact capacity : 30V (AC/DC) 0.1A (resistive load) Protective resistor	
Alarm LED	Red LED (Receiver) ON : when an alarm is initiated	
Attenuation LED	Red LED (Receiver) ON : when beam is attenuated	
Ambient temperature range	-31°F to +151°F (-35°C to +66°C)	
Beam adjustment	Horizontal: ±90°, Vertical: ±20°	
Functions	Modulated beam frequency selection, Tone indicator, Environmental module, Beam power selection, Transmitting power adjutment, Alarm output selection, Environmental output selection, Monitor jack, Tamper Response time adjustment, Upper/Lower beam switch Wireless checker	
Mounting positions	Outdoor, Indoor	
IP rating	65	
Wiring	Terminals	
Weight	Transmitter : 52.5oz (1500g) Receiver : 54.3oz (1550g)	
Appearance	PC resin (wine red)	

Please note : This sensor is designed to detect intrusion and to initiate an alarm; it is not a burglary or a crime 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.

TAKEX

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