

# PASSIVE INFRARED SENSOR

PA-8410E (Wide angle protection)

PA-8420E (Vertical curtain protection)



With its unique high-density protection area, PA-8410E and PA-8420E can protect places with high ceilings such as showrooms, halls, factories and warehouses.

## PROTECTION AREA ESPECIALLY DESIGNED TO PROTECT FROM HIGH MOUNTING POSITIONS

With the unique high-density protection field created by the 4 mirrors equipped inside the unit, it can be used with confidence to protect places with ceilings between 4 and 8 meters high.

## SUITABLE FOR INDOOR AND OUTDOOR USE

With a rain-proof casing, these units are suitable for both internal and external applications.

## STRONG HOUSING CASES

The casings of these units are made from AES resin which improves the unit's resistance to impact.

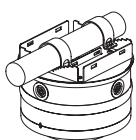
Ideal for use in locations such as sports halls where unit may be subjected to impact.

## EXTERNAL APPLICATIONS

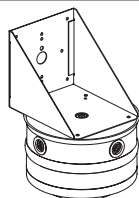
The units are constructed with weather-resistant seals to prevent water from entering.

(For exposed wiring, use water-proof grommet or conduit.)

## OPTIONAL



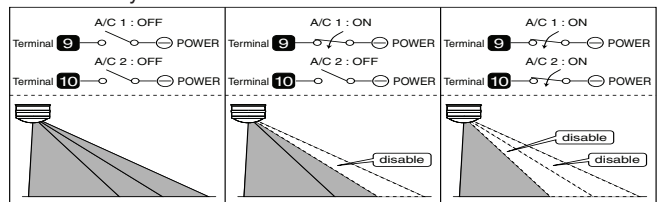
Horizontal Pole mount option [BP-03]



Wall mount option [BL-8400]

## FUNCTIONS

- L/C (LED control) function  
The unit is equipped with L/C function by which the LED function can be remotely activated/de-activated. L/C function enables simple walk test functionality after unit is installed.
- A/C (Area control) function  
The unit is equipped with A/C function by which area coverage can be remotely disabled/enabled.



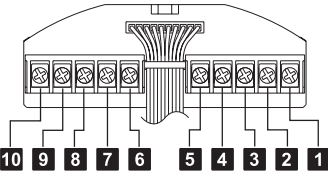
## OTHER FEATURES

- N.C./N.O. output silent relay  
Photo MOSFET switch relay engaged at alarm output.
- Tamper Switch  
The units have independent tamper outputs activated by removal of cover.
- Pulse count selectable (Only applicable to PA-8410E)  
Pulse count is selectable for one, two, three and four counts.
- Sensitivity adjustment  
Sensitivity is adjustable for 60%, 80%, 100% and 120%.

# PASSIVE INFRARED SENSOR

## ■ TERMINAL ARRANGEMENT

[Terminal arrangement]

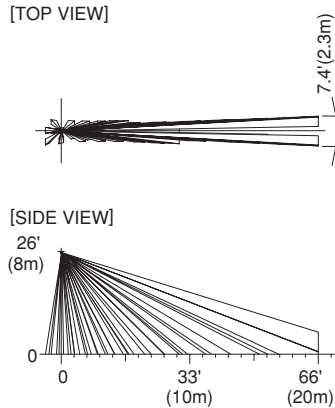
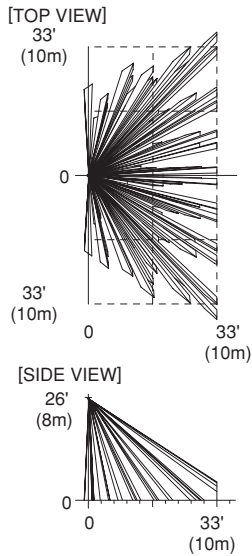


- 1 2** ● Power (non-polarity) : 9 to 30V DC 30mA MAX.
- 3 4 5** ● Alarm : Dry contact (Semi-conductor) output (N.C./N.O.)  
: Protective resistor 3.3Ω  
: One-shot output at detection (Approx. 2sec.)  
: A series of continuous output when detecting functional trouble(Until recovery)  
: A series of continuous output when detecting low supply voltage(Until recovery)  
: Rating: 24V (AC/DC) 0.25A (resistive load)
- 6 7** ● Tamper output : Dry contact output (N.C.)  
: Real time output when the cover is detached from the unit.  
: Rating: 30V (AC/DC) 0.1A (resistive load)
- 8** ● L/C(LED control) input : Alarm LED lighting is controlled on the side of the input voltage (-).
- 9** ● A/C(AREA control)-1 input : Protection area 1 is enabled or disabled on the side of input voltage (-).
- 10** ● A/C(AREA control)-2 input : Protection area 2 is enabled or disabled on the side of input voltage (-).

## ■ DETECTION AREA (Unit : ft(m))

■ PA-8410E  
(Wide angle protection)

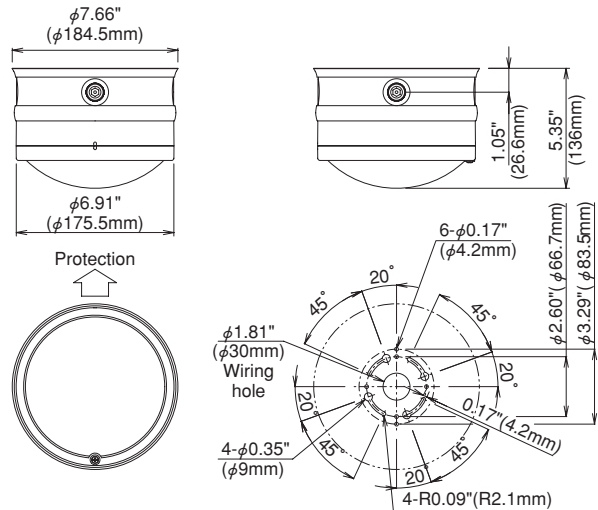
■ PA-8420E  
(Vertical curtain protection)



## ■ SPECIFICATIONS

Model	PA-8410E	PA-8420E
Detection system	Passive infrared	
Coverage	Wide angle 33' (10m) Max. 56 Zones(112 beams)	Vertical Curtain 66' (20m) Max. 30 Zones(60 beams)
Coverage adjustment	Vertical : 24° Horizontal : ±15°	
Mounting position	Indoor or outdoor ceiling	
Installation height	13'(4m) to 26'(8m)	
Supply voltage	9 to 30V DC (non-polarity)	
Current consumption	30mA Max.	
Alarm output	<ul style="list-style-type: none"> <li>• Dry contact(semi-conductor) output (N.C./N.O.)</li> <li>• 24V (AC/DC) 0.25A (resistive load) (protective resistor 3.3Ω)</li> <li>• Warm up : Approx.1min.(No alarm condition)</li> <li>• One-shot output at detection (Approx.2sec.)</li> <li>• Continuously output when detecting functional troubles.</li> <li>• Continuously output when detecting low supply voltage.</li> </ul>	
Tamper output	<ul style="list-style-type: none"> <li>• Dry contact output : (N.C.)</li> <li>• 30V (AC/DC) 0.1A (resistive load)</li> <li>• Tamper output : Real time output</li> </ul>	
Alarm LED	<ul style="list-style-type: none"> <li>• Red LED</li> <li>• Blinks during warm up (Approx. 1min.)</li> <li>• One shot lights (Approx. 2sec.) at detection</li> <li>• Continuously lights when detecting functional troubles.</li> <li>• Continuously lights when detecting low supply voltage.</li> </ul>	
Functions	<ul style="list-style-type: none"> <li>• Trouble alarm</li> <li>• Low supply voltage alarm</li> <li>• Tamper signal</li> <li>• LED control(L/C)</li> <li>• Area control(A/C)</li> <li>• Alarm LED(ON/OFF)</li> <li>• Sensitivity adjustable for 60/80/100/120%</li> </ul>	
	Pulse count selectable for 1/2/3/4	—
Ambient temperature range	+4°F to +122°F(-20°C to +50°C) without condensation	
Wiring	Terminals	
Weight	33.25oz (950g)	
Appearance	Body : AES resin , Cover : PE resin	
Accessories	Water-proof grommet : 1pce, tapping screw : 2pcs	

## ■ EXTERNAL DIMENSIONS (Unit : inch(mm))



**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

### In Japan

Takenaka Engineering Co., Ltd.  
83-1, Gojo-sotokan,  
Higashino, Yamashina-ku,  
Kyoto 607-8156, Japan  
Tel : 81-75-501-6651  
Fax : 81-75-593-3816  
<http://www.takex-eng.co.jp>

### In the U.S.

Takex America Inc.  
1330, Orleans Drive,  
Sunnyvale,  
CA 94089, U.S.A.  
Tel : 408-747-0100  
Fax : 408-734-1100  
<http://www.takex.com>

### In Australia

Takex America Inc.  
Unit 16/35 Garden Road,  
Clayton 3168 Victoria,  
Australia  
Tel : 03-9546-0533  
Fax : 03-9547-9450

Takex America Inc.  
Brisbane office : 1/50 Logan  
Road, Woolloongabba  
Queensland  
4102, Australia  
Tel : 07-3891-3344  
Fax : 07-3891-3355

### In the U.K.

Takex Europe Ltd.  
Takex House, Aviary Court,  
Wade Road, Basingstoke,  
Hampshire, RG24 8PE, U.K.  
Tel : (+44) 01256-475555  
Fax : (+44) 01256-466268  
<http://www.takexeurope.com>