

# PASSIVE INFRARED SENSOR

PA-5312E (Wide angle 12m/40ft) / PA-5325E (Vertical curtain 25m/83ft)



Patent pending : 2 / Utility model pending : 6 / Design pending : 1



## QUAD PIR WITH NEW SIGNAL PROCESSING

High quality new generation joined in PULNiX passive infrared sensors family. Quad elements coupled with new signal processing (discriminating temperature differential information and object size information) provide high "catchability". The series offers some unique features that make it a desirable choice for high security applications.

### High performance

Newly designing of new-developed dual twin element, optical unit and signal processing circuitry enables high density protection area. Ceiling / wall mountable.

### Slight motion detection -New technology-

Selectable twin / quad sensing. Unit can be adjusted from quad element sensing to twin element sensing, which results in double the number of sensitive zone, for situations where close range detection is desirable. (Highest sensitivity setting)

### Self-test function

The unit conducts a checking test of alarm contact whenever an alarm is initiated. An alarm LED flashing if the contact is short or damaged by induced lightning, etc.

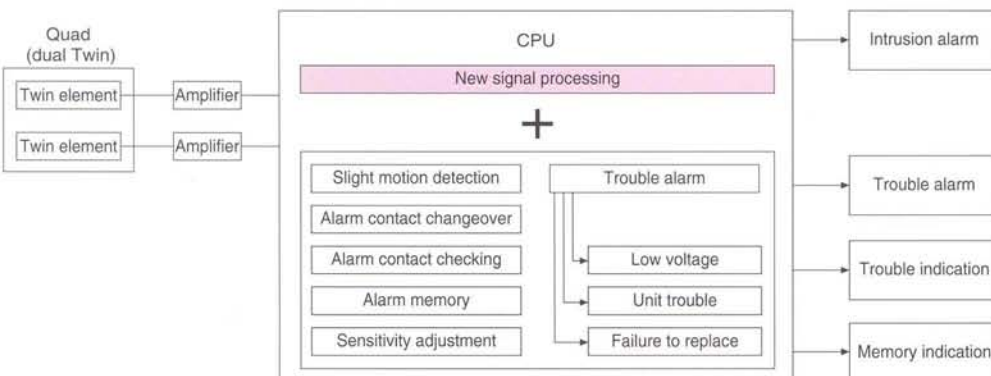
### Built-in alarm memory

Memory LED will inform you which sensor triggered an alarm during armed condition when two or more sensors are connected on the same line.

### Trouble alarm

Trouble is informed by continuous alarm output and continuous lighting of alarm LED .

- Low voltage  
Trouble alarm triggers when sensor supply voltage drops down to approx. 8.5V DC
- Unit trouble  
Trouble alarm triggers when inner circuit / wiring is damaged / broken.
- Failure to replace  
Trouble alarm triggers when the aiming device is failed to be replaced after aiming is completed.



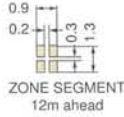
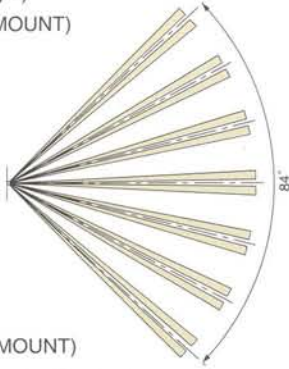


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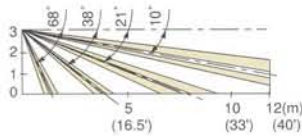
## ■ COVERAGE (Unit : m)

PA-5312E (Wide angle)

• TOP VIEW (CEILING MOUNT)



• SIDE VIEW (CEILING MOUNT)

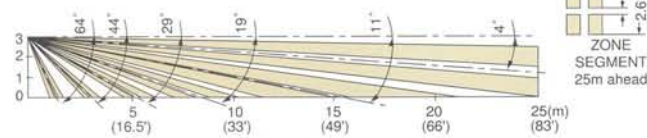


PA-5325E (Vertical curtain)

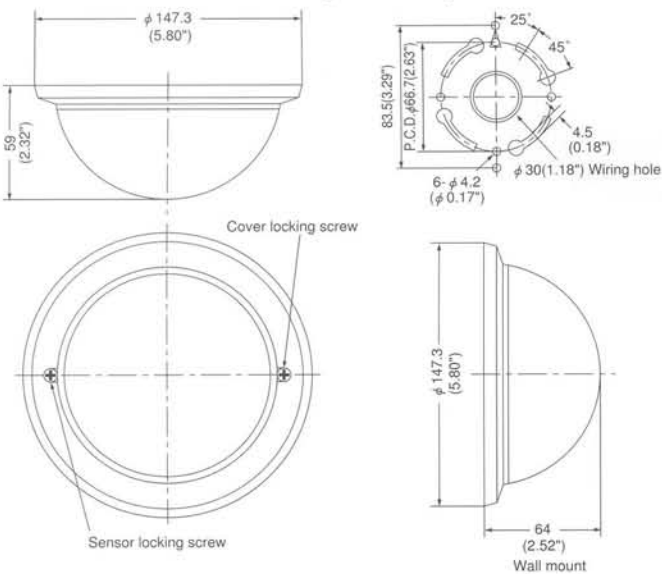
• TOP VIEW (CEILING MOUNT)



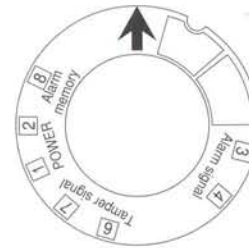
• SIDE VIEW (CEILING MOUNT)



## ■ EXTERNAL DIMENSIONS (Unit : mm)



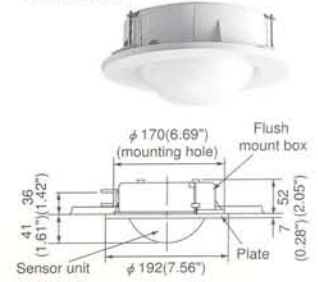
## ■ TERMINAL ARRANGEMENT



- ①-② Power (non-polarity) N.C. contact : 25mA or less  
9.5 to 30V DC N.O. contact : 35mA or less
- ③-④ Alarm output N.O./N.C. contact changeover  
Dry contact relay Reset : approx. 2 sec.  
30V, 0.25A
- ⑥-⑦ Tampor output N.C. contact  
Dry contact relay Operation : Open when  
cover/sensor body is detached.  
30V, 0.1A or less
- ⑧ Alarm memory

## ■ OPTIONAL

• Flush mount attachment  
< BU-5300 >



• Level checker  
< EL-02 >



## ■ SPECIFICATIONS

Passive infrared sensor		
Model	PA-5312E	PA-5325E
Detection system	Passive infrared (QUAD)	
Coverage	Wide angle 12m(40') Max.	Vertical plane (curtain) 25m(83') Max.
Sensitive zone	72 (18 pairs)	24 (6 pairs)
Supply voltage	9.5V to 30V DC (non-polarity)	
Current consumption	N.C. contact : 25mA Max. N.O. contact : 35mA Max.	
Alarm output	Dry contact relay (N.O./N.C. changeover) Reset : Approx. 2 sec. 30V AC/DC 0.25A Max. (protective resistor 3.3 Ω)	
Tampor output	Dry contact relay (type N.C.) Open when cover or body is detached 30V 0.1A Max.	
Alarm memory	Auto-reset memory : 3 min. -Flickering, 47 min. -Lighting Manual memory : Memory disabled / indication / reset control by using terminal 8	
Slight motion detection	Sensitive zone : 36 pairs	Sensitive zone : 12 pairs
Alarm LED	Red LED Flickering (every 0.5 sec.) : Warming-up Lighting (approx. 2 sec.) : Alarm Flickering (every 0.25 sec.) : Trouble indication Continuous lighting : Trouble alarm (Disabled is LED except trouble indication)	
Memory LED	Yellow LED Flickering : Memory activated Lighting : Memory indicated	
Trouble indication	Alarm contact checking whenever an alarm outputs Operation : Trouble indication	
Trouble signal	Unit trouble : Monitoring inner circuit and wiring damage Operation : Trouble alarm Low voltage trouble : Monitoring low voltage Operation : Trouble alarm Positioning trouble : Monitoring failure to replace view finder Operation : Trouble alarm	
Ambient temperature range	-10°C to +55°C (without dewdrops) (+14°F to +131°F)	
Mounting position	Indoor ceiling / wall	
Wiring connections	Terminals	
Weight	250g (8.75oz)	
Appearance	Body : ABS resin Cover : PE resin	
Adjustment range	Ceiling mount : Vertically 24° Horizontally ±15° Wall mount : Vertically 20° Horizontally ±5°	

The passive infrared sensor is designed to detect infrared energy variations caused by the presence of a human body. Therefore, note that similar variations in conditions in protected area, due to other reasons, may cause the sensor to create an alarm as it is unable to distinguish between sources.

**Please note :** This sensor is designed to detect intrusion and to initiate an alarm ; it is not a burglary - preventing device. PULNiX 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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