

HIGH PERFORMANCE TRIPLE MIRROR PIR SENSOR

PIR-T15WE PIR-T15AM (ANTI-MASK VERSION)

**WIDE ANGLE PROTECTION:
UP TO 49' (15m) x 80°**

FEATURES

- 4 Selectable operation modes; low position, high position, pet, and high density
- Up to 49' (15m) x 80 degree coverage
- 6.6' (2m) to 20' (6m) Installation height (depending on operation mode)
- High performance triple mirror optical system
- Precise detection area adjustment function
- Anti-masking function (PIR-T15AM)
- Lightning surge protection
- Suitable for indoor and outdoor use (IP55)
- Available in white (W) and grey/black (G)



PIR-T15WE/AM (W)

PIR-T15WE/AM (G)

A unique triple mirror optical system with signal processing technology eliminates nuisance alarms from small animals

TRIPLE MIRROR OPTICAL SYSTEM

The unique combination of triple mirrors and three twin pyros enable 4 selectable operation modes including low position, high position, pet, and high density; for distances up to 49' (15m) from a mounting height of 6.6' (2m) to 20' (6m), throughout a full 80°.

OPTIMISED DETECTION AREA

The triple mirror optical system features a geared mirror array allowing detection patterns to be dynamically optimised for maximum performance depending on the chosen mounting height and operation mode.

PET IMMUNITY

Independently controlled pyro devices in each optical unit use intelligent signal processing to eliminate nuisance alarms from small animals, and a dedicated pet operation mode further enhances discrimination performance against medium-sized animals.

PRECISE AREA ADJUSTMENT

Precise detection area adjustment is made possible by projecting coloured LED's onto the surface of each mirror -visible only from inside the detection zone during the alignment process- allowing sensitive zones to be fine-tuned to individual site requirements as desired. Unnecessary areas can be cancelled using the supplied area-masking sheet.

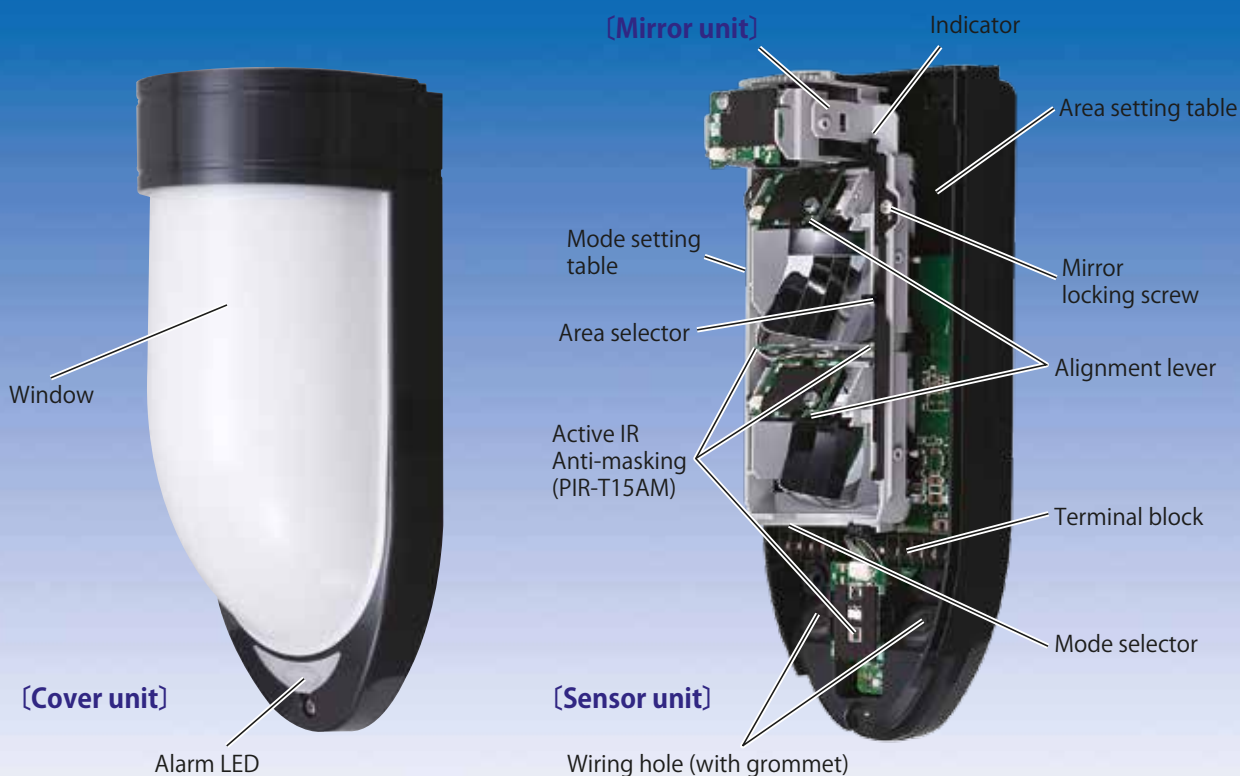
DESIGN CONSCIOUS

The PIR-T15's unassuming design allows it to blend discreetly into any industrial, commercial or domestic environment, and the internally adjustable optic system helps to conceal the detection area and direction for more secure protection.

OTHER FUNCTIONS

Enhanced features including creep zone detection, near area cancellation, dual outputs, and lightning surge protection make the PIR-T15 a key addition to the TAKEX family of high performance intrusion detection sensors.

〈PARTS DESCRIPTION〉



High performance



Triple mirror optical system

Triple mirror optical units combined with fuzzy logic signal processing substantially reduce nuisance alarms and activations.



Pet immunity

A dedicated pet operation mode further enhances discrimination performance against medium-sized animals in the detection area.



Detection area checking function

The unit is equipped with an LED detection area checking function for precise area adjustment and control.



Weather proof housing

The lid is designed to channel rain and snow away from the front surface of the sensor preventing nuisance alarms.



Anti-masking (PIR-T15AM)

An anti-masking alarm output signals any attempt to shield or cover the unit.

Enhanced features



Varied installation height

Mounting height of 6.6' (2m) to 11.5' (3.5m) for normal operation (max. 20' (6m) in specialised operation mode).



Detection area adjustment

The mirror unit can be adjusted ± 80 degrees horizontally and 17 degrees vertically for optimal area setting.



Pole/Ceiling mounting

Various pole attachment brackets are available (sold separately).



Dual output

A second N.O. output is provided for signalling external devices.



Insect/Water protection

Suitable for indoor and outdoor use (IP55).

Eco friendly



Lightning protection

Enhanced protection from induced lightning and other electrical surges.



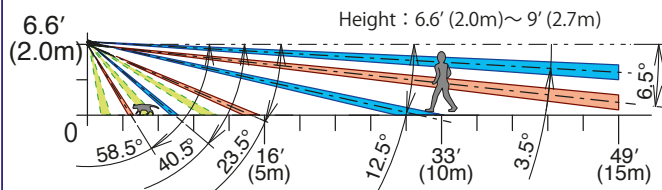
Environmental design

Certified RoHS compliant: free from Lead, Mercury, Cadmium, Hexavalent Chromium, Polybrominated biphenyl, Polybrominated diphenyl ether.

Standard operation

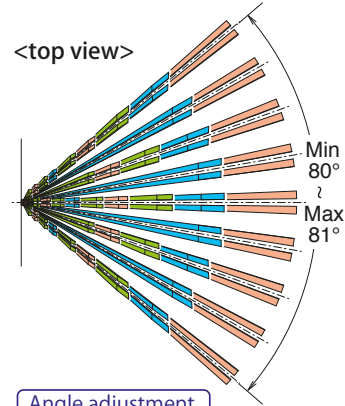
Low position mode

<side view>

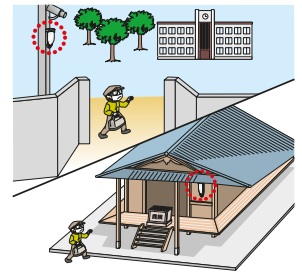


Angle adjustment : 17° (Vertically)

<top view>



Angle adjustment
90° (Horizontally)

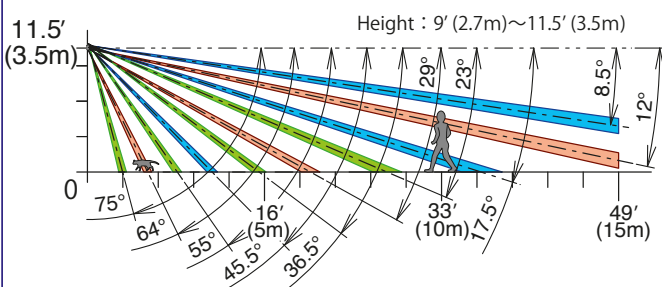


Height: 6.6' (2m) ~ 9' (2.7m)

Signal CCTV, alarm, or lighting controllers in a wide range of intruder applications in the standard 'low position operation mode'.

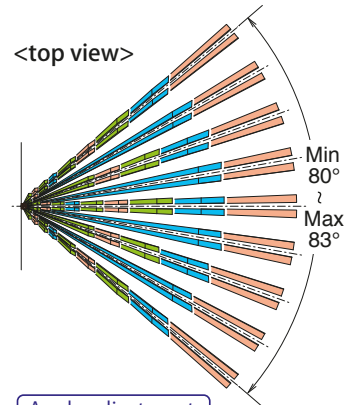
High position mode

<side view>



Angle adjustment : 17° (Vertically)

<top view>



Angle adjustment
90° (Horizontally)



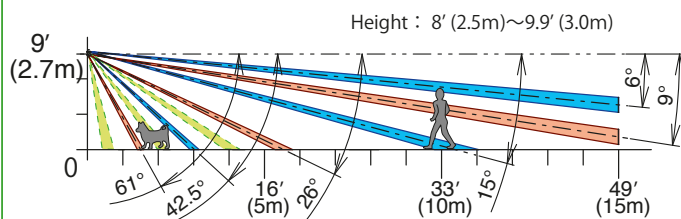
Height: 9' (2.7m) ~ 11.5' (3.5m)

Use to activate lighting systems for safety applications in warehouses, or for monitoring intrusion attempts from up to 11.5' (3.5m) mounting height.

Specialised operation

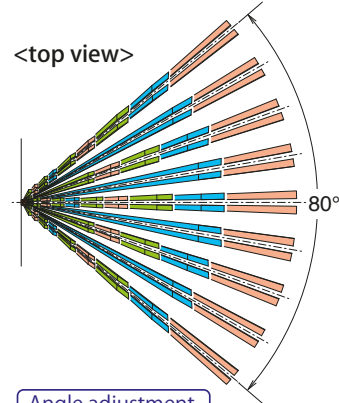
Pet mode

<side view>

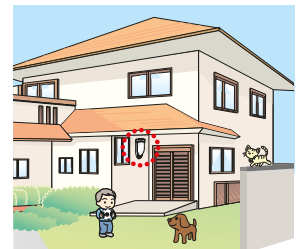


*The detection distance can be adjusted with area masking sheet.

<top view>



Angle adjustment
90° (Horizontally)

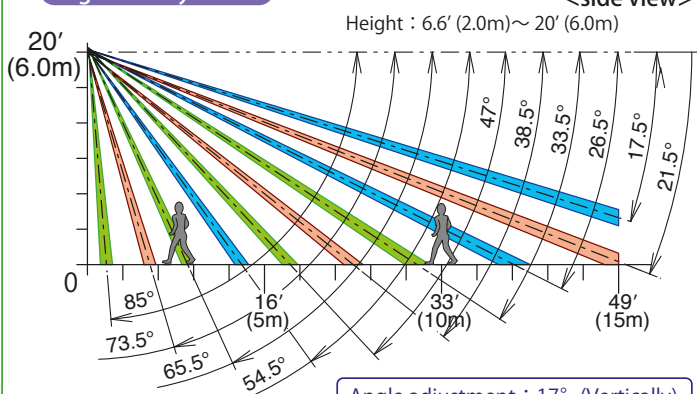


Height: 8' (2.5m) ~ 9.9' (3m)

The dedicated 'Pet mode' further enhances discrimination performance against medium-sized animals moving within the detection area.

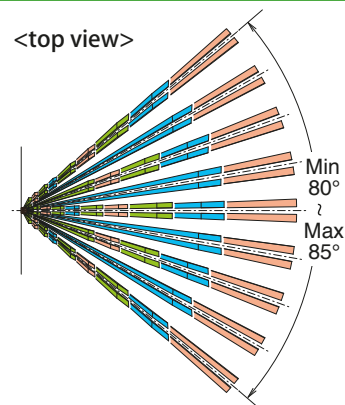
High density mode

<side view>



Angle adjustment : 17° (Vertically)

<top view>



Angle adjustment
90° (Horizontally)



Height: 6.6' (2m) ~ 20' (6m)

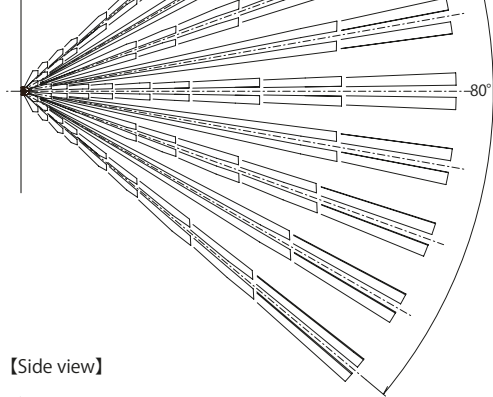
Mount up to 6m in height with a coverage of 49' (15m) x 80° 'high density mode', perfect for high installations such as open ceiling entrances.

TRIPLE MIRROR PASSIVE SENSOR

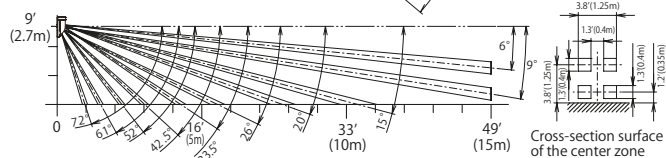
Detection area

In the setting of installation
height : 9' (2.7m)
distance : 50' (15m)

【Top view】

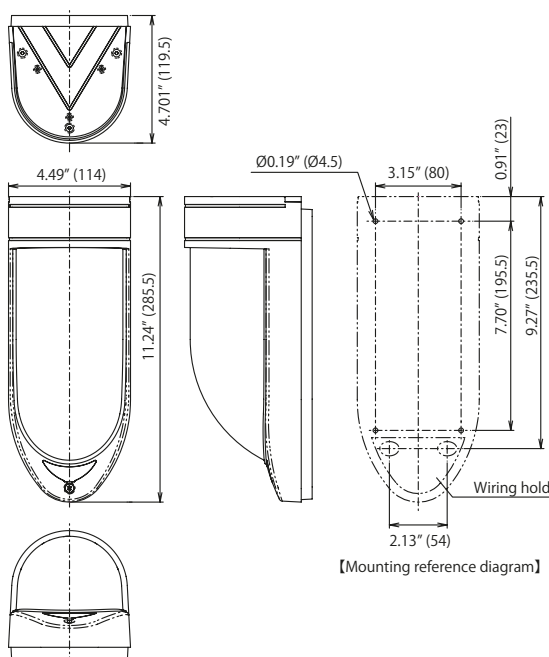


【Side view】



External dimensions

Unit : inch (mm)



Options

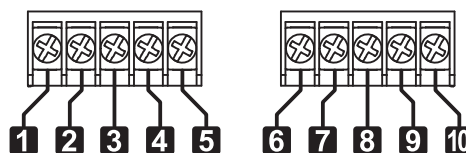
● Pole attachment
<BP-32>



● Ceiling attachment
<KP-32>



Terminal configuration



- 1 2 Power input (non-polarity) 9 to 28V DC/Max. 40mA
- 3 4 Alarm output - Contact method : Dry semi-conductor contact N.O./N.C. selectable
- 5 LED control input (L/C) - Control lighting on/off of the alarm LED
- 7 8 Tamper output - Contact method : Dry mechanical contact N.C.
- 9 10 Output for external device : Dry semi-conductor contact N.O.
- 6 7 Anti-masking output - Contact method : Dry semi-conductor contact N.C. (PIR-T15AM model only)

Specifications

Model	Triple mirror passive sensor	
Model number	PIR-T15WE (W/G)	PIR-T15AM (W/G)
Detection system	Passive infrared	
Detection area	Wide angle (80°) detection Detection distance: 49'(15m), 108 rays (54 pairs)	
Power supply	9 to 28V DC (non-polarity)	
Current consumption	Max. 40mA	
Alarm output	Contact method : Dry semi-conductor contact, N.C./N.O. selectable Contact operation : One-shot operation when detecting intrusion Continuous output in the event of cover monitor error Continuous output in the event of alignment position error Continuous output in the event of self diagnosis error Continuous output in the event of power voltage error Continuous output in the event of long-term diagnosis error Contact rating : 24V (AC/DC) 0.25A (resistive load) (built-in contact protective resistor 3.3Ω)	
External output	Contact method : Dry semi-conductor contact N.O. Contact operation : One-shot operation/Off delay operation selectable when detecting intrusion Contact rating : 24V (AC/DC) 0.25A (resistive load) (built-in contact protective resistor 3.3Ω)	
Tamper output	Contact method : Dry mechanical contact, N.C. Contact operation : Continuous output Contact rating : 24V (AC/DC) 0.1A (resistive load) (built-in contact protective resistor 3.3Ω)	
Anti-masking output	N/A	Contact method: Dry semi-conductor contact N.C. Contact operation: Continuously output when an object is placed in front of the lens (until normal recovery) Contact rating: 24V (AC/DC) 0.25A (resistive load) (built-in protective resistor 3.3Ω)
Alarm LED	Red LED : Blinks* during warm up Lights up* when detecting intrusion Continuously blinks in the event of cover monitor error Continuously lit in the event of alignment position error Continuously blinks in the event of self diagnosis error Continuously lit in the event of power voltage error Continuously blinks in the event of long-term diagnosis error (*ON/OFF selectable using the mode selector)	
Memory LED	Red LED : Blinks for 3 minutes during memory display, Auto reset operation either of continuous lighting for 47 minutes or blinking for 50 minutes selectable (Blinks to lights/blinks, ON/OFF selectable using the mode selector)	
Functions	Sensitivity selection, Operation mode selection, Alarm memory LED, Selfdiagnosis, Low voltage monitoring, Temperature compensation, Tamper, LED area checker, Environmental adjustment, Creep zone detection, Walk test mode, Near area cancellation, Long-term diagnosis	
Mounting positions	6.6' to 20'(2.0 to 6.0m) (varies depending on the operation mode) • Low position mode : 6.6' to 9'(2.0 to 2.7m) • High position mode : 9' to 11.5'(2.7 to 3.5m) • Pet mode : 8.3' to 10'(2.5 to 3.0m) • High density mode : 6.6' to 20'(2.0 to 6.0m)	
Area angle adjustment range	Horizontal direction : 90° (by 5° pitch) Vertical direction : 17° (no stage adjustment)	
Ambient temperature range	25~+55°C (no condensation and freezing)	
Installation place	Indoor/outdoor wall surface * Can be mounted on poles and ceilings (or under eaves) using optional accessories	
IP rating	IP55	
Connections	Terminals (M2.6 self up terminal)	
Weight	Approx. 600g	
Appearance	Body: ASA resin (white), Window: PE resin (white) Body: ASA resin (gray), Window: PE resin (white)	

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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.